

A Qualitative Investigation of Social Support among Sports Coaches¹

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Abstract

Past research highlights coaching as a stressful occupation with social support being an important way for coaches to cope with stressors. However, research has failed to focus solely on social support among coaches. This is important as social support can enhance psychological well-being, and therefore enhance coach performance. This thesis addresses the void in the literature on social support with sports coaches, and in doing so, makes an original and significant contribution to social support and coaching knowledge. Chapter one offers an introduction to the thesis including a systematic review of stressors, coping, and well-being among coaches and a conceptualization of social support that encompasses social support structure, resources, and functions. This chapter acts as a scoping study and provides an introduction to the research area that informed the subsequent studies that qualitatively explores male and female sport coaches' social networks, resources, and functions.

Chapter three examines sports coaches' perceptions of social support, social network structure, social support resources, and the situations where coaches use social support. Coaches turned to peers, friends, family, and miscellaneous (e.g., internet) for support. Peers were predominant avenues of support yet friends were the most influential population. Chapter four develops on the previous chapter by exploring male and female coaches social support resources that are provided by the social network. Coaches social support resources were explored over a six-week period, perceptions of social networks using photo-elicitation, and perceived effects of social support resources on stressors were also studied. Coaches used all four types of social support resources (appraisal, emotional, informational, and

instrumental). Informational support was used foremost by coaches. Chapter five uses a longitudinal exploratory multiple case study to explore perceived and received social support functions with UEFA B licensed female soccer coaches. This chapter continues on from the previous chapters by investigating whether coaches are satisfied with the perceived support network and the resources that they receive. The coaches perceived they had a lack of access to formal social networks and received both negative and positive exchanges of social support resources.

Chapter six concludes the thesis by discussing key findings, strengths and limitations, implications, and future research directions from the thesis. Notably, National Governing Bodies should educate coaches on the importance of social support and how to build effective social networks. Future research is needed to further advance social support understanding among sports coaches such as exploring perceived and received support and further longitudinal studies.

Declaration

I confirm that this thesis is my own work and that all published or other sources of material consulted have been acknowledged in notes to the text or in the references.

I confirm that the thesis has not been submitted for a comparable academic award.

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Introduction

The effects of stressors on occupational performance and well-being have been explored in various professional contexts including law enforcement (Kaiseler, Queirós, Passos, & Sousa, 2014), nursing (Woodhead, Northrop, & Edelstein, 2016), public services (Liu, Yang, & Yu, 2015), and teaching (McCarthy, Lambert, Lineback, Fitchett, & Baddouh, 2015). Collectively, the findings of this research suggest that high levels of perceived stress can reduce performance and contribute to negative health implications. In a sport context, a considerable amount of research has examined the stress experiences of athletes (e.g., Arnold, Fletcher, & Daniels, 2017; Didymus & Fletcher, 2014; Hayward, Knight, & Mellalieu, 2017; Kaiseler, Polman, & Nicholls, 2012; Nicholls, Polman, & Levy, 2012; Thelwell, Wagstaff, Rayner, Chapman, & Barker, 2017). The findings highlight that the coach can be a substantial stressor for athletes, that athletes are influenced by coaches' stress experiences (e.g., Thelwell *et al.*, 2017), and that coaches stress experiences are also influenced by athletes (Nicholls & Perry, 2016). The growing realization of the influence that a coach can have on the athlete has stimulated research that focuses on sports coaches as performers (Gould, Greenleaf, Guinan, & Chung, 2002).

The International Council of Coaching Excellence (ICCE) define coaching as “a process of guided improvement and development in a single sport at identifiable stages of athlete development.” (International Council for Coaching Excellence, 2013, p. 14). On a day-to-day basis, coaches across all performance levels are regularly expected to develop engaging and winning training programs, recruit athletes, cope with performance (e.g., competitive performances) and organizational

(e.g., arranging travel to events) stressors, and manage relationships with different stakeholders such as athletes, administrators, officials, media, and parents (Chroni, Diakaki, Perkios, Hassandra, & Schoen, 2013; Knights & Ruddock-Hudson, 2016; Rathwell, Bloom, & Loughead, 2014). Completing these roles and responsibilities can lead coaches to work long, unsociable hours (Knight, Reade, Selzler, & Rodgers, 2013), and feel isolated (Knowles, Tyler, Gilbourne, & Eubank, 2006; Nash, Sproule, & Horton, 2017; Olusoga, Butt, Maynard, & Hays, 2010). This has especially been found with coaches at elite performance levels who work in a volatile environment where his or her job is often insecure (Fletcher & Scott, 2010). All of the aforementioned factors make coaches a unique population to explore (Didymus, 2016) and susceptible to burnout (McNeill, Durand-Bush, & Lemyre, 2017; Olusoga & Kenttä, 2017), particular in team sports such as soccer (Hjälml, Kenttä, Hassmén, & Gustafsson, 2007; Lundkvist, Gustafsson, Hjälml, & Hassmén, 2012) and with female coaches who frequently face surplus hostile coaching environments and stressors (Walker & Bopp, 2011). Nonetheless, this unique population has received limited research attention when compared to that which has been directed at athletes (Olusoga, Butt, Hays, & Maynard, 2009). Given that there are over 2.4 million male and female coaches across a variety of performance and coaching contexts working in the U.K alone (UK Coaching, 2016) who may face a variety of stressors (Rhind, Scott, & Fletcher, 2013; Robbins, Gilbert, & Clifton, 2015; Thelwell *et al.*, 2008a), we should better understand coaches experiences to facilitate the development of positive sport environments that may optimize both coach and athlete performance.

Sport psychology researchers have frequently adopted a transactional conceptualization of stress (Lazarus & Folkman, 1984). The transactional perspective proposes stress as an umbrella term that encompasses stressors, appraisals, coping, and emotions as central parts of stress transactions (Didymus, 2016). From this perspective, stress is defined as “an ongoing process that involves individuals transacting with their environments, making appraisals of the situations they find themselves in, and endeavoring to cope with any issues that may arise” (Fletcher, Hanton, & Mellalieu, 2008, p. 329). Stressors can be defined as “environmental demands (i.e., stimuli) encountered by an individual” (Lazarus, 1999, p. 329). In the sport psychology literature, scholars have generally agreed on categorizing stressors as organizational (e.g., administration) or performance (e.g., athletes during a match; e.g., Fletcher & Scott, 2010; Mellalieu, Neil, Hanton, & Fletcher, 2009; Thelwell *et al.*, 2008a). Other researchers have offered interpersonal (e.g., relationships with others) and intrapersonal (e.g., own emotions towards an event; Frey, 2007; Robbins *et al.*, 2015) categorizations of stressors to complement organizational and performance. According to transactional stress theory, individuals evaluate (i.e., appraise) these stressors on an ongoing basis to assess the significance of them to their well-being. The appraisal process is made up of primary and secondary appraising where an individual evaluates whether or not the situation is relevant to one’s values and well-being (harm/loss, threat, and or challenge) and then assess the coping resources available to the individual (Lazarus, 1999). A reappraisal may occur after an initial appraisal (Lazarus & Folkman, 1984).

A stressful appraisal is thought to activate coping (Lazarus, 1999), which can be defined as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding

the resources of the person” (Lazarus & Folkman, 1984, p. 141). Coping strategies can be categorized as high-order coping dimensions, such as emotion- (regulation of emotional states, e.g., visualization) or problem-focused (managing person-stressor transaction, e.g., social support; Lazarus & Folkman, 1984). More recent sport psychology researchers have suggested three further categorizations of coping: avoidance- (e.g., cognitive or behavioral efforts to avoid the situation), approach- (e.g., increasing effort), and appraisal-focused coping (e.g., re-appraising a situation to reduce its importance; see Nicholls & Polman, 2007). Whilst the five aforementioned categories are the most widely used among sport psychology researchers, there remains some debate about how coping should be categorized (see Didymus, 2016; Didymus & Fletcher, 2014; Skinner, Edge, Altman, & Sherwood, 2003) and other researchers (e.g., Gaudreau & Blondin, 2002) have suggested a further three dimensions that relate to task (e.g., imagery), distraction (e.g., distancing by using of their social network), and disengagement (e.g., emotional social support by venting) coping. On the other hand, Didymus (2016) recommends categorizing coping into families (e.g., dyadic coping, escape, information seeking, negotiation, problem solving, self-reliance, and support seeking) that each represent a different function in adaptation. Categorizing coping into families may be useful as it offers a more dynamic approach (Skinner *et al.*, 2003). Thus, the question of how best to categorize coping remains unanswered.

How an individual copes with a stressor is a complex phenomenon that will influence a person’s well-being (Malik & Noreen, 2015). Defining well-being is a challenge because published definitions often focus on dimensions of well-being (e.g., positive feelings or positive functions; Dodge, Daly, Huyton, & Sanders, 2012), rather than capturing the essence of what well-being actually is. The question

of how well-being should be defined remains largely unresolved, which has resulted in multiple, broad definitions being reported in the literature (Gasper, 2010). Well-being can be viewed from a positive psychology standpoint as “a broad category of phenomena that includes people’s emotional responses, domain satisfactions, and global judgments of life satisfaction” (Diener, Suh, Lucas, & Smith, 1999, p. 277). This phenomenon can be also be classified into more specific types of well-being such as; emotional (happiness or satisfaction; Diener & Larsen, 1993), psychological (e.g., autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance; Ryff & Keyes, 1995), and social (e.g., social integration, social contribution, social coherence, social actualization, and social acceptance; Keyes, 1998) well-being.

Whilst Fletcher and Scott (2010) previously published a narrative review of psychological stress among sports coaches and focused on definitional and theoretical issues, no published systematic review has comprehensively identified, evaluated, and summarized the research on stressors, coping, and well-being among coaches. This is surprising given the influence that stress and well-being can have on coaches’ performance (Fletcher & Hanton, 2003; Stoszkowski & Collins, 2016) and the need to better understand coaches’ experiences to offer evidence-based recommendations for stress management, support, and, ultimately, performance enhancement (Didymus, 2016). With this in mind, the purpose of the study was to conduct a systematic review of stressors, coping, and well-being among sports coaches. Systematic reviews are considered as one of the highest quality evidence resources available as they allow for large amounts of literature to be brought together, critically appraised, and synthesized methodically (Akobeng, 2005). Furthermore, the logical methods used during a systematic review limit bias and

hence, improve reliability and accuracy of conclusions for theoretical and practical implications (Moher *et al.*, 2015). Consequently, and in line with the bottom-up approach that was adopted for this thesis (Frosh & Emerson, 2005), the recommendations from the systematic review will inform the foundations of the research program that is described in subsequent chapters (three, four, and five) by providing a comprehensive and thorough review of the sports coaching literature aiming to synthesize knowledge and highlight specific areas that require further investigation on stressors, coping, and psychological well-being (PWB). From a practical perspective, the proposed systematic review will provide coaches, sports psychology practitioners, organizations, National Governing Bodies (NGBs), and researchers with a rigorous summary of key findings on coaches' stressors, coping, and well-being, including implications for practice, as well as providing insight to coaches' stress experiences that can be used to educate coaches to enhance performance and PWB.

1.1. Method

1.1.1. Study Design

Systematic reviews are at the top of the hierarchies of evidence (Moher *et al.*, 2015) because of the methodical approach towards synthesizing the literature and the great potential it has to provide theoretical and methodological impact and inform practice (Siddaway, Wood, & Hedges, 2018). The detailed approach to systematic reviews means it has the capability to bring together vast quantities of information from different research techniques to synthesize, critique, and provide insights into the quality of evidence of a particular phenomenon and produce unbiased summaries of the cumulative evidence (Baumeister, 2013). Whilst meta-syntheses are rigorous (Williams, Smith, & Papatthomas, 2014), this type of synthesis concentrates on

qualitative evidence. In contrast, meta-analyses synthesize and critique quantitative data (Siddaway *et al.*, 2018). These types of analysis are useful in research areas where there are large quantities of one specific type of research design. However, the sports coaching literature is not homogenous which makes it difficult to conduct a meta-analysis or synthesis, but provides an opportunity to conduct a systematic review. Systematic reviews do not constitute a homogeneous approach and this aligns with the interpretivist epistemology of qualitative research to preserve meaning from the original text (Williams *et al.*, 2014).

The summaries produced by systematic reviews can provide robust conclusions in research areas that are lacking in homogeneity (e.g., sample sizes, methods of data collection, and variables measured) by identifying associations, contradictions, gaps, and inconsistencies in the literature that inform future research and practice (Siddaway *et al.*, 2018). Ultimately, a thorough systematic review can provide a novel and substantive contribution to the knowledge area (Moher *et al.*, 2015). This provides an opportunity in the sport coaching literature to systematically collate and synthesize the growing research on stressors, coping, and well-being and offer conclusions and implications for scholars, as well as practitioners, to encourage future generations to become sport coaches and help current coaches to reach higher levels of performance and psychological well-being. However, it is important to note that systematic literature reviews do not automatically contain high-quality, reliable evidence (Siddaway *et al.*, 2018). Conducting a systematic review is a highly sophisticated task and one that has the potential to become stressful or overwhelming due to the time intensive process (Shamseer *et al.*, 2015). For example, during the first stage of screening, there are often a high number of studies that are assessed (see Figure 1). Therefore, finding the appropriate time to complete the systematic review

process can be daunting. To overcome this challenge, I created a template in a Microsoft® Excel® spreadsheet so that the relevant information for each article could be easily transferred, saving time. Another potential difficulty of conducting a systematic review is that it is resource demanding (Baumeister, 2013). During the sifting process, the researcher is likely to come across relevant articles aligned to the research aims that cannot be obtained due to protected access. If researchers only use readily available articles, important studies may be missed making conclusions unreliable (Baumeister, 2013). To mitigate this challenge in this thesis, the university facilitated temporary access to any articles (n=3) in external libraries that may have been appropriate but full access could not be obtained by myself. This meant that no important papers were missing from the review.

1.1.2. Search Strategy

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA-P) guidelines (Moher *et al.*, 2015; see also Appendix A) were used to guide this review. The PRISMA-P guidelines were chosen because they help to ensure logical planning of the systematic review process, document the process enabling others and myself to compare the protocol and the completed review, replicate review methods and judge the validity of the methods, and to reduce duplication of efforts (Shamseer *et al.*, 2015). Furthermore, these guidelines have been used in previous systematic reviews in sport (e.g., Macdougall, O'Halloran, Shields, & Sherry, 2015). Thorough searches of three electronic databases (PsycINFO, SPORTDiscus, and Web of Science) were conducted between December 2015 and March 2016. These databases are well established among the academic community and have been used in previous systematic reviews in sport and exercise psychology (e.g., Nicholls & Polman, 2007; Rumbold, Fletcher, & Daniels,

2012; Staff, Didymus, & Backhouse, 2017). Furthermore, they represent a variety of disciplines (e.g., sport psychology and general psychology) and, therefore, help to ensure the comprehensiveness of this review.

A list of keywords was drafted to identify relevant empirical studies: coach, coaches, stress, coping, stress management, burnout, well-being, well being, and wellbeing (see Table 1). The keywords were determined through the use of scoping searches. This included typing in keywords into the relevant search engines to assess appropriateness of those keywords (e.g., athletic trainer; see also study reflections). The final keywords were decided following scope searches, discussions between myself and my supervisory team, and having read other relevant systematic reviews in both sport (Rumbold *et al.*, 2012) and non-sporting contexts (Edwards & Burnard, 2003). The keywords provided sufficient synonyms and spellings to ensure a comprehensive search. For example, the term ‘stress’ and not ‘stressor’ was used because stressor is incorporated under the stress umbrella (Lazarus & Folkman, 1984) and during the scoping searches, the term ‘stressor’ recorded significantly less results than ‘stress’ with a large amount of the articles that were returned being duplicates. Additionally, the term ‘stress management’ was used as a keyword as an alternative term for coping and ‘burnout’ was used to ensure that no studies were missed on the topic of well-being.

Table 1

Search Strings Used to Retrieve Articles from Each Database

Keyword	Search string	Limiters
Coaches	Coaches AND Stress Coaches AND Coping Coaches AND Stress management Coaches AND Burnout Coaches AND Well-being OR Wellbeing OR Well being Coaches AND Stress OR Coping OR Stress management OR Burnout OR Well- being OR Wellbeing OR Well being	Full text available Published between 1994 and 2016 Published in a peer- reviewed journal Available in full in the English language
Coach	Coach AND Stress Coach AND Coping Coach AND Stress management Coach AND Burnout Coach AND Well-being OR Wellbeing OR Well being Coach AND Stress OR Coping OR Stress management OR Burnout OR Well-being OR Wellbeing OR Well being	

Note. Each of the searches was conducted at the full text level (TX All Text).

The final keywords were grouped together with the OR Boolean operator (e.g., well-being OR well being OR wellbeing) and combined using the AND Boolean operator (e.g., coach OR coaches AND stress). These keyword combinations helped to provide both broad and specific searches to produce articles relevant to the aim of the research. Once the searches were completed, citation pearl growing (Schlosser, Wendt, Bhavnani, & Nail-Chiwetalu, 2006) was used to gather additional papers that may have been missed during the initial searches. Information relating to these articles were also included in then Microsoft® Excel® spreadsheet.

1.1.3. Criteria for Inclusion

To ensure that the searches returned studies that were relevant to the aims of this review, various inclusion and exclusion criteria were used. The inclusion criteria detailed that papers must have been published as full papers in a peer-reviewed journal in the English language between January 1994 and March 2016. The rationale for restricting the search period to research that had been published post-1994 was twofold. First, during the initial scoping searches, no date restrictions were applied yet published works prior to 1994 were sparse and those that were available did not meet the other inclusion criteria. Second, the chosen search dates span 22 years, which was deemed an appropriate period of time that is similar to other published systematic reviews in sport psychology (e.g., Harwood, Keegan, & Smith, 2015). Studies also had to use a qualitative, quantitative, or mixed methods design and to present data on stressors, coping, and or well-being among sports coaches. Qualitative, quantitative, and mixed methods research were included so that a comprehensive review of the available literature could be produced. Review papers were omitted from the final selection because they may omit relevant information relating to the aims pertinent to this review and cannot be assessed for quality assessment using Kmet's checklist. Citation pearl growing was conducted on review manuscripts to ensure no articles were missed. Articles were excluded if they were published as books, abstracts, or conference proceedings, or if they focused on other populations (e.g., athletes). Books, abstracts, and conference proceedings were omitted because have not been peer-reviewed and can provide insufficient data to comprehensively analyze and synthesis.

1.1.4. Sifting of Retrieved Citations

The sifting process was carried out in three stages as recommended by Jones (2004) and as used in previous systematic reviews in sport (e.g., Rumbold *et al.*, 2012). Papers were reviewed for appropriateness first by title, then by abstract, and, finally, by full text (see Figure 1). These three stages of sifting ensured that all appropriate articles were excluded or included from the review at each stage. During the first stage of sifting (title phase), information relating to each of the articles (i.e., authors, year of publication, and article title) were extracted and recorded in the Microsoft® Excel® spreadsheet to ensure that all exclusions at the title level were done so appropriately. Duplicate papers were removed from the Microsoft® Excel® spreadsheet and recorded in a separate document for transparency. Papers that did not satisfy the inclusion criteria at each stage were removed. Inter-rater reliability checks were conducted with the supervisory team to ensure that articles being excluded or included were done so appropriately and, therefore, that no suitable articles were missed from the final sample. Sample articles (n=5, 7.6% of final sample) for the inter-rater reliability checks were chosen at random using the random number generator function in Microsoft® Excel® consistent with the PRISMA-P guidelines used throughout this review (Moher *et al.*, 2015). In addition, three articles (Alcaraz, Torregrosa, & Viladrich, 2015; Stebbings, Taylor, & Spray, 2011; Tashman, Tenenbaum, & Eklund, 2010) that had borderline appropriateness were purposefully included in this sample. The supervisory team were supplied with a Microsoft® Word® document that included the list of the inclusion criteria as well as a table that comprised of the authors, title and level of review (e.g., abstract or full text) for each article. Additional empty boxes were included in the table to allow the reviewers to put their decisions and any additional comments. The authors agreed on

the inclusion or exclusion of 92% of the selected studies. In the case of the one study that there was a disagreement with, further discussions took place with the supervisory team until there was a consensus for the article to be included in the final sample. The discussions involved the amount of information relating to stressors in the article. It was agreed that there was sufficient data to include this article in the final sample.

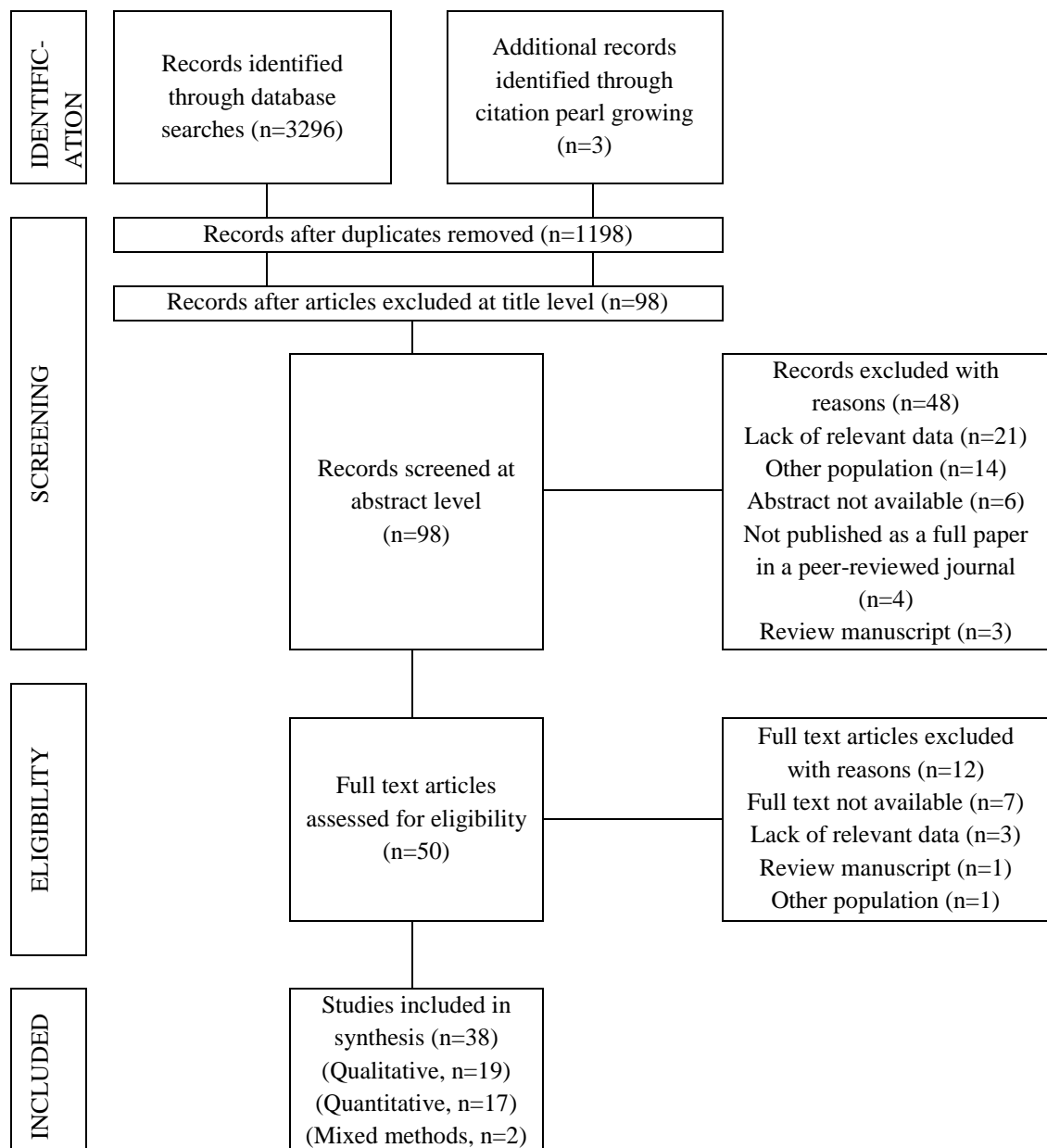


Figure 1. PRISMA-P flow diagram summarizing the study selection criteria

and number of manuscripts at each stage of the systematic review process.

1.1.5. Characteristics of Final Sample

Each article in the final sample was read and annotated on paper, and data were extracted to develop a comprehensive table of study characteristics. The extracted data from each study in the final sample related to: the underpinning theoretical framework(s), the aim(s), study design, interviewee characteristics (i.e., sample size, mean age, gender, sport, coaching experience, and coaching level), country where the research was conducted, and key findings. This information was included in a table to provide myself and the readers with a summary of each of the articles included in the final review. The results of each of the studies were reviewed and amalgamated using narrative synthesis (Popay *et al.*, 2006). Narrative synthesis aligns with constructionism epistemology by adopting a textual approach and focusing on the narrative summary of findings rather than a statistical summary (Popay *et al.*, 2006). This allows the researcher to tell the story of the findings. The use of this synthesis permitted the review to incorporate diverse forms of evidence to be organized in a way that allowed relevant information, connections, and conclusions to be presented (Rodgers *et al.*, 2009). This synthesis was used to summarize and organize the qualitative, quantitative, and mixed-methods studies in the final sample.

1.1.6. Risk of Bias

To assess risk of bias among the studies in the final sample and to adhere to the PRISMA-P guidelines, Kmet, Lee, and Cook's (2004) quality assessment criteria were used to assess each article on an individual basis (see Appendix B). Each quantitative, qualitative, and mixed methods article was evaluated against Kmet *et al.*'s checklist. For the quantitative studies, a 14-item checklist was used to score each article (see Table 3) according to how well it satisfied each of the criteria

(2=fully meets the criteria, 1=partially meets the criteria, 0=does not meet the criteria). The quality score was created by using only the relevant assessment items rather than the full 14-item checklist. Items that were not applicable to a particular study were marked with 'n/a' (i.e., not applicable) and excluded from the quality score calculations (see Table 4).

Table 3

Quality Assessment Criteria for Quantitative Studies

Criteria Number	Quality Assessment Criteria
1)	Question or objective sufficiently described?
2)	Study design evident and appropriate?
3)	Method of comparison group selection or source of information or input variables described as appropriate?
4)	Subject (and comparison group, if applicable) characteristics sufficiently described?
5)	If interventional and random allocation was possible, was it described?
6)	If interventional and blinding of investigators was possible, was it reported?
7)	If interventional and blinding of subjects was possible, was it reported?
8)	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement bias? Means of assessment reported?
9)	Sample size appropriate?
10)	Analytical methods described, justified and appropriate?
11)	Some estimate of variance is reported for the main results?
12)	Controlled for confounding?
13)	Results reported in sufficient detail?
14)	Conclusions support the by results?

Table 4

Quality Assessment Scores of Quantitative Studies Included in the Final Sample

Article	Quality Assessment Criteria														Total Score	Quality Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Alcaraz, Torregrosa, & Viladrich (2015)	2	2	2	1	n/a	n/a	n/a	2	1	2	2	n/a	2	2	18	90%
Bentzen, Lemyre, & Kenttä (2016)	2	2	2	2	n/a	n/a	n/a	2	2	2	2	n/a	2	2	20	100%
Georgios & Nikolaos (2012)	2	1	1	1	n/a	n/a	n/a	2	1	1	0	n/a	1	2	12	60%
Hudson, Davison, & Robinson (2013)	2	2	1	1	n/a	n/a	n/a	2	1	2	2	n/a	2	2	17	85%
Judge <i>et al.</i> (2015)	2	1	2	2	n/a	n/a	n/a	2	2	2	2	n/a	2	2	19	95%
Kelley, Eklund, & Ritter-Taylor (1999)	2	2	2	2	n/a	n/a	n/a	2	2	2	2	n/a	2	2	20	100%
Kelley (1994)	2	2	2	1	n/a	n/a	n/a	2	2	0	2	n/a	2	2	17	85%
Kellmann & Kallus (1994)	2	1	1	1	n/a	n/a	n/a	1	2	1	0	n/a	0	1	9	45%
Knight, Reade, Selzler, & Rodgers (2013)	2	2	2	1	n/a	n/a	n/a	2	2	2	2	n/a	2	2	19	95%
Kulmatycki & Bukowska (2007)	2	1	1	1	n/a	n/a	n/a	1	2	0	n/a	n/a	2	2	12	67%
Malinauskas, Malinauskiene, & Dumciene	2	2	2	2	n/a	n/a	n/a	2	2	1	0	n/a	1	2	16	80%
Nikolaos (2012)	2	2	1	1	n/a	n/a	n/a	2	2	2	2	n/a	2	2	18	90%
Olusoga, Maynard, Butt, & Hays (2014)	2	2	2	2	n/a	n/a	n/a	2	1	2	n/a	n/a	2	2	17	94%
Stebbing, Taylor, & Spray (2011)	2	2	1	2	n/a	n/a	n/a	2	2	2	2	n/a	2	2	19	95%
Stebbing, Taylor, & Spray (2015)	2	2	1	2	n/a	n/a	n/a	2	2	2	2	n/a	2	2	19	95%
Stebbing, Taylor, Spray, & Ntoumanis (2012)	2	2	1	2	n/a	n/a	n/a	2	2	1	2	n/a	2	2	18	90%
Surujlal & Nguyen (2011)	2	2	2	2	n/a	n/a	n/a	1	1	0	n/a	n/a	1	1	12	67%
Tashman, Tenenbaum, & Eklund (2010)	2	2	2	1	n/a	n/a	n/a	2	2	2	2	n/a	2	2	19	95%

The quality assessment for the qualitative studies was based on a 10-item checklist (see Table 5) using the same scoring protocol as that which was used for the quantitative articles. The applicable parts of each mixed-methods study were assessed using the relevant criteria (i.e., quantitative aspects were assessed using the 14-item checklist and qualitative aspects were assessed using the 10-item checklist) and included in the applicable tables. A total quality score was calculated for each article and then converted to a percentage for standardization purposes (see Table 6).

Table 5

Quality Assessment Criteria for Qualitative Studies

Criteria Number	Quality Assessment Criteria
1)	Question or objective sufficiently described?
2)	Study design evident and appropriate?
3)	Context for the study clear?
4)	Connection to a theoretical framework or wider body of knowledge?
5)	Sampling strategy described, relevant, and justified?
6)	Data collection method clearly described and systematic?
7)	Data analysis clearly described and systematic?
8)	Use of verification procedure(s) to establish credibility?
9)	Conclusions supported the by results?
10)	Reflexivity of the account?

Table 6

*Quality Assessment Scores of Qualitative Studies Included in the Final**Sample*

Article	Quality Assessment										Total Score	Quality Score
	1	2	3	4	5	6	7	8	9	10		
Bloom, Durand-Bush, & Salmela (1997)	2	2	2	2	2	1	2	0	2	0	15	75%
Bruening & Dixon (2007)	2	1	2	2	2	2	2	0	2	0	15	75%
Chroni <i>et al.</i> (2013)	2	1	2	2	2	1	0	0	2	0	12	60%
Didymus (2016)	2	2	2	2	2	2	2	2	2	2	20	100%
Dixon & Bruening (2007)	1	1	2	2	2	2	2	0	2	0	14	70%
Durand-Bush, Collins, & McNeill (2012)	2	2	2	2	2	2	1	2	2	0	17	85%
Frey (2007)	2	2	2	2	2	2	2	0	2	0	16	80%
Knight & Harwood (2009)	2	2	2	2	1	2	2	2	2	0	17	85%
Knights & Ruddock-Hudson	2	2	2	1	0	2	2	2	2	2	17	85%
Kulmatycki & Bukowska	2	1	1	1	1	1	1	0	2	0	10	50%
Levy, Nicholls, Marchant, & Polman (2009)	2	2	2	2	1	2	2	0	2	0	15	75%
Lundkvist, Gustafsson, Hjälms, & Hassmén (2012)	2	2	2	1	2	1	2	2	2	0	16	80%
Olusoga, Butt, Hays, & Maynard (2009)	2	2	2	2	2	2	2	0	2	0	16	80%
Olusoga, Butt, Maynard, & Hays (2010)	2	2	2	2	2	2	2	0	2	0	16	80%
Olusoga, Maynard, Hays, & Butt (2012)	2	2	2	2	2	2	2	0	2	0	16	80%
Olusoga, Maynard, Butt, & Hays (2014)	2	2	2	2	2	2	2	0	2	0	16	80%
Rhind, Scott, & Fletcher	2	2	2	2	2	2	2	0	2	0	16	80%
Robbins, Gilbert, & Clifton	2	2	2	2	2	2	2	2	2	0	18	90%
Thelwell, Weston, Greenlees, & Hutchings (2008a)	2	2	2	2	1	2	2	0	2	0	15	75%
Thelwell, Weston, Greenlees, & Hutchings (2008b)	2	2	2	2	2	2	2	0	2	0	16	80%
Thelwell, Weston, & Greenlees (2010)	2	2	2	2	2	2	2	0	2	0	16	80%

1.2. Results

1.2.1. Study Characteristics

Table 2 provides a summary of study characteristics for the included studies. The final sample consisted of 19 qualitative papers, 17 quantitative papers, and two mixed methods papers (total n=38). The included studies adopted cross-sectional (78.9%), longitudinal (10.5%), intervention (7.9%), and case study (2.6%) research designs with a total of 4,188 participants. When assessing the gender of these participants, 3,107 (74.2%) of the participants were male and 944 (22.5 %) were female. The authors of some studies did not report the gender of their participants, which accounted for 137 (3.3%) of the total amount of participants. The qualitative research studies accounted for 340 of the total number of participants, quantitative studies accounted for 3,823, and mixed methods studies accounted for 25 of the 4,188 participants. The participants ranged in age from 15 to 77 years, had a range of coaching experience (0-49 years), and coached at 15 different levels. Some studies (n=7) recruited coaches from more than one context or coaching level while other studies (n=29) focused on coaches who were working at the same level and two studies did not specify coaching level. College (n=9), elite (n=9), and national (n=7) level coaches were most frequently recruited. The other coaching levels that were reported in the final sample were international (n=4), university (n=4), high performance (n=3), recreational (n=3), regional, (n=3), developmental (n=2), Olympic (n=2), non-elite (n=2), club (n=2), youth (n=1), provincial (n=1), and professional (n=1). The authors of two studies did not specify the level of coaches that they recruited. The coaching levels described here are taken verbatim from the studies in the final sample and a lack of consistency in the literature has resulted in some overlap between the levels that I have been able to report.

Turning to the underpinning theories that were used to guide the studies in the final sample, 15 studies were not supported by a theoretical framework. Of the studies that were theory driven, some (n=18) were underpinned by one theory while others made use of multiple theoretical frameworks (n=5). The theoretical frameworks that were most commonly used were the cognitive-affective model of stress and burnout (Smith, 1986; n=8); transactional stress theory (Lazarus & Folkman, 1984; n=6); self-determination theory (SDT; Deci & Ryan, 2000; n=5); Kelley's (1999) model of stress and burnout (n=3); the cognitive-motivational-relational theory of stress and emotion (Lazarus, 1999; n=1); and the meta-model of stress, emotions, and performance (Fletcher *et al.*, 2008; n=1). The results of this review highlight that research on stressors, coping, and well-being among coaches has predominantly been conducted in Europe (n=23) and the United States of America (n=9). In Europe, the dominant country of research was the U.K. (n=12) followed by Greece (n=3) and Sweden (n=2).

Table 2

Study Characteristics of Studies Included in Final Sample

Authors	Study Title	Aim(s)	Design	Participants	Coach Level	Country	Theoretical Framework(s)	Sport(s)	Key Findings
Alcaraz, Torregrosa, & Viladrich (2015)	How coaches' motivations mediate between basic psychological needs and well-being/ill-being	Test how behavioral regulations are mediated between basic psychological needs and PWB and ill-being in a sample of team-sport coaches	Quant/Cross-Sectional	238M/54F ($M_{age}=25.9$, $SD=8.1$, $CE=1-49$)	NS/D	Spain	Self Determination Theory	Basketball, Soccer	Coaches motivation mediated the relationships from both relatedness need satisfaction and basic psychological needs thwarting for coach's well-being. Basic psychological needs satisfaction and thwarting and ill-being were predicted by direct effects.
Bentzen, Lemyre, & Kenttä (2016)	Changes in motivation and burnout indices in high performance coaches over the course of a competitive season	Ascertain whether the 4-step self-determination theory process model explains burnout and well-being among high performance	Quant/Longitudinal	314M/29F ($M_{age}=40.3$, $SD=9.8$, $CE=1-49$)	NS/HP C	Norway, Sweden	Self Determination Theory	Basketball, Biathlon, Handball, Ice Hockey, Orienteering, Skating, Ski Jumping, Skiing (Alpine,	On average, coach burnout increased and well-being decreased over the course of a competitive season. Changes in perceived environment led to changes in psychological need satisfaction and, in turn, to changes in autonomous motivation

		coaches.						Cross-Country, Nordic Combined, Telemark), Soccer, Swimming, Track and Field, Volleyball	and burnout and well-being.
Bloom, Durand-Bush, & Salmela (1997)	Pre- and post-competition routines of expert coaches of team sports	Expert coaches' perceptions of their pre- and post-competition routines.	Qual/Cross-Sectional	21 ($M_{age}=45.5$, $CE=12-31$)	NS/E	Canada	Coaching Model	Basketball, Field Hockey, Ice Hockey, Volleyball	Prior to competition, coaches prepared and mentally rehearsed their game plan and maintained a positive focus. After competition, coaches focused on emotional control.
Bruening & Dixon (2007)	Work-family conflict in coaching II: Managing role conflict	Consequences of work-family conflict among female coaches. Coping mechanisms used to achieve success at work and quality of life	Qual/Cross-Sectional	41F ($M_{age}=35.4$, $CE=2-10$)	H/C	United States	NS	Basketball, Cross Country, Rowing, Soccer, Softball, Tennis, Track, Volleyball	Work-family conflict influenced outcomes related to work, family, and life. Coping mechanisms included organization and time management, support networks, and being flexible with working hours.

Chroni <i>et al.</i> (2013)	What stresses coaches in competition and training? An exploratory inquiry	with family. Distinguish between training-specific and competition-specific stressors.	Qual/Cross-Sectional	22M/5F ($M_{age}=43.4$, SD=8.4, CE=4-35)	NS/E, N, Y	Greece	NS	Alpine Skiing, Athletics, Basketball, Crew, Rhythmic Gymnastics, Soccer, Volleyball, Wrestling	Pressure and expectations (e.g., athlete performance, coach performance, organization-environment, and competition stressors) were found to be high-order categories.
Didymus (2016)	Olympic and international level sports coaches' experiences of stressors, appraisals, and coping	Use the cognitive-motivational-relational theory of stress and emotions to explore psychological stress with Olympic and international sports coaches. Explore situational properties of stressors and coaches' appraisals.	Qual/Cross-Sectional	9M/6F ($M_{age}=36.9$, SD=15.4, CE = 8-35)	NS/OL, I	United Kingdom	Cognitive-Motivational-Relational Theory of Stress and Emotions	Athletics, Equestrian, Netball, Rugby League, Rugby Union, Squash, Tennis, Triathlon, Water Polo	The coaches experienced stressors related to ten themes (e.g., athlete concerns, performance). Stressors were underpinned by seven situational properties (e.g., ambiguity, imminence, novelty). The coaches reported challenge, threat, benefit, and harm/loss appraisals. Ways of coping related to seven families of coping (e.g., dyadic coping, support seeking) that each play a different role in adaptive processes.

Dixon & Bruening (2007)	Work–family conflict in coaching I: A top-down perspective	Develop Dixon and Bruening’s (2005) multilevel framework of work-family conflict in relation to high-level coaching.	Qual/Cross-Sectional	41F ($M_{age}=35.4$, $CE=2-10$)	H/C	United States	Multilevel Model of Work-Family Conflict in Sport	Basketball, Cross Country, Rowing, Soccer, Softball, Tennis, Track, Volleyball	Particular attention was paid to how higher-level factors (e.g., work climate, culture) shaped and constrained lower level attitudes and behaviors (e.g., individual conflict, time management).
Durand-Bush, Collins, & McNeill (2012)	Women coaches experiences of stress and self-regulation: A multiple case study	Examine self-regulation strategies for coping with stress. Explore coaches’ perceptions of the impact of stress and self-regulation on well-being, burnout, and coaching effectiveness.	Qual/Multiple Case Study	8F ($M_{age}=40.5$, $CE=5-25$)	NS/HP C, D	Canada	Cognitive-Affective Model of Stress and Burnout, The Model of Self-Regulation	Alpine Ski, Curling, Hockey, Paddling, Ringette, Rowing, Synchronized Skating	Coaches faced various internal and external demands in their coaching and personal lives. The coaches reported using several types of self-regulation strategies (e.g., breathing techniques) to cope with stressful situations.
Frey (2007)	College coaches’ experiences with stress - “problem	Understand coaches’ experiences of stress, the perceived	Qual/Cross-Sectional	6M/4F ($M_{age}=45.7$, $CE=14-35$)	H/C	United States	Cognitive-Affective Model of Stress and Burnout	Baseball, Basketball, Diving, Softball, Swimming,	Five major themes characterized the coach’s experiences: contextual/conditional factors, sources of stress,

	solvers” have problems, too	effects of stress on coaching performance, and coping strategies.						Tennis, Volleyball	responses and effects of stress, managing stress, and sources of enjoyment.
Georgios & Nikolaos (2012)	An investigation of a model of personal-situational factors, stress and burnout in track and field coaches	Examine a conceptual model of personal/situational variables, perceived stress, and burnout.	Quant/Cross-Sectional	164M ($M_{age}=40.9$, $SD=8.2$, $CE=1+$)	NS/N	Greece	Cognitive-Affective Model of Stress and Burnout	Track and Field	Variables of hardiness, competitive trait anxiety, and satisfaction were all found to be moderators of stress perception. The variables of this model suggest that it can predict the burnout syndrome.
Hudson, Davison, & Robinson (2013)	Psychophysiological and stress responses to competition in team sport coaches: An exploratory study	Conduct a multidisciplinary in situ examination of coaches’ psychophysiological responses to competition stress.	Quant/Cross-Sectional	10M ($M_{age}=39.8$, $SD=13.1$, $CE=0.5-21$)	NS/NE	Finland	Reversal Theory	NS	On competition day, alpha-amylase activity was significantly higher, as were subjective stress, arousal, and unpleasant emotions. Prior to and during active play, participants were mainly in conformist, alloic, and mastery states. At the end of play, coaches were in telic and sympathy states.
Judge <i>et al.</i> (2015)	Understanding the occupational	Investigate sources of occupational	Quant/Cross-Sectional	52M/15F ($M_{age}=44.51$, $CE=0-40$)	H & A/C	United States	NS	Track and Field	When all three predictors (Social support, years coaching experience, and

	stress of collegiate track and field coaches during the championship season	stress for coaches during the championship season.							division currently coaching at) were entered into the model, social support and NCAA division were significant predictors of task-based stress. As social support increased, task-based stress decreased.
Kelley, Eklund, & Ritter-Taylor (1999)	Stress and burnout among collegiate tennis coaches	Extend understanding of burnout among coaches.	Quant/Cross-Sectional	163M/99F ($M_{age}=2$, $SD=10.3$, $CE=1-33$)	H/C	United States	Kelley's Model of Coach Stress and Burnout, Cognitive-Affective Model of Stress and Burnout	Tennis	Tennis coaches experienced levels of burnout similar to those of other helping professionals. There was a significant main effect for gender but not for competition level. Female coaches had a higher tendency than male coaches to find coaching issues stressful.
Kelley (1994)	A model of stress and burnout in collegiate coaches: Effects of gender and time of season	Examine a model of stress and burnout in coaches.	Quant/Longitudinal	131M/118F ($M_{age}=36.6$, $SD=8.8$, $CE=1-17$)	H/C	United States	Cognitive-Affective Model of Stress and Burnout	Baseball, Softball	Both male and female coaches higher in coaching issues and lower in hardiness were higher in perceived stress. Males were lower in social support satisfaction and higher in perceived stress.

Kellmann & Kallus (1994)	Interrelation between stress and coach's behavior during rest periods	Examine the interrelation between stress and coach's behavior during rest periods.	Quant/Cross-Sectional	141M/13F ($M_{age}=40.8$, $SD=9.4$)	NS	Germany	NS	NS	Coaches who are highly stressed by practice were significantly less active and less authoritarian during rest periods than low stressed colleagues. Coaches who were highly stressed by competition were significantly less warm-hearted than the low stressed group.
Knight & Harwood (2009)	Exploring parent-related coaching stressors in British tennis: A developmental investigation	Provide a detailed insight into the stressors that coaches encounter due to their interactions with parents.	Qual/Cross-Sectional	58M/12F ($M_{age}=31.6$, $SD=7.3$, $CE=2-29$)	NS/NE	Canada	Developmental Model of Sport Participation	Tennis	Sampling-stage coaches reported stressors relating to parents' understanding of tennis and development. Specializing-stage coaches highlighted stressors concerning parental pressure and involvement. Investment-stage coaches replicated many of the specializing stage stressors but highlighted various methods to reduce parent-related stressors.
Knight, Reade, Selzler, & Rodgers	Personal and situational factors influencing	Identify coaches' levels of perceived stress.	Quant/Cross-Sectional	459M/43F ($M_{age}=43$)	H & A/C, U, N	United Kingdom	Meta-Model of Stress, Emotions, and Performance	NS	Demographic factors, job-related characteristics, and certain aspects of their contract were associated

(2013)	coaches' perceptions of stress	Examine personal and situational factors that influence coaches' perceptions of stress.							with coaches' perceptions of stress. Unclear expectations, long working hours, and a lack of social support were related to higher perceptions of stress.
Knights & Ruddock-Hudson (2016)	Experiences of occupational stress and social support in Australian Football League senior coaches	Examine the experiences of occupational stress and social support of Australian Football League senior coaches.	Qual/Cross-Sectional	12 ($M_{age}=44$, $SD=6.4$, $CE=1-12$)	NS/N	Australia	NS	Australian football	Five themes emerged from the findings. Pressurized workplace environments; development and improvement of others and self; accountabilities and responsibilities to others; advice, support and comfort from others; and stress and adversity, the ramifications.
Kulmatycki & Bukowska (2007)	Differences in experiencing relaxation by sport coaches in relation to sport type and gender	Compare individual sports coaches and team sports coaches in terms of their responses to and experiences of relaxation	Quant/Intervention	91 ($M_{age}=33$)	NS	Poland	NS	NS	Relaxation level of student coaches of individual sports were found to be significantly higher in comparison to student coaches of team sports. Female student coaches achieved the highest relaxation scores.

Levy, Nicholls, Marchant, & Polman (2009)	Organization al stressors, coping, and effectiveness: A longitudinal study with an elite coach	exercises. Determine the frequency of organizational stressors and coping strategies reported by an elite coach. To identify coping strategies used and their effectiveness.	Qual/ Longitudinal	1M ($M_{age}=40$, H/E CE=6)		United Kingdom	NS	Aquatics	Administration, overload, competition environment, athletes, and team atmosphere were salient organizational stressors. Coping related to problem-focused, emotion-focused, and avoidance strategies. These strategies were generally effective, but coping effectiveness declined over a 28-day period.
Longshore & Sachs (2015)	Mindfulness training for coaches: A mixed-method exploratory study	Determine the efficacy of the Mindfulness Training for Coaches (MTC) program and to qualitatively evaluate the MTC's mechanics and impact.	Mixed/ Intervention	8M/12F ($M_{age}=34.5$, SD=9.9, CE=3-44)	H & A/C	North East United States	NS	NS	Trained coaches reported significantly less anxiety and greater emotional stability. State measures showed that trained coaches were lower in anxiety and adverse emotions at each time point. Interviews showed six distinct positive impacts on coaches: anxiety and stress, emotions, mindfulness, coaching, athletes, and personal life.

Lundkvist, Gustafsson, Hjälm, & Hassmén (2012)	An interpretative phenomenological analysis of burnout and recovery in elite soccer coaches	Increase knowledge of elite soccer coach's burnout experiences. Gain knowledge about coaches' stress recovery.	Qual/Cross-Sectional	8M ($M_{age}=43$) H/E	Sweden	NS	Soccer	Two profiles were found: problems in handling performance culture and stressors relating to overall situation, including workload, family and health. When combined with work overload, coaches who have problems coping with the performance culture and who lack the tools to cope were particularly vulnerable.
Malinauskas, Malinauskienė, & Dumciene (2010)	Burnout and perceived stress among university coaches in Lithuania	Investigate associations between burnout, gender, working experience, and perceived stress among university coaches.	Quant/Cross-Sectional	136M/67F ($M_{age}=35$, $SD=9.6$, $CE=1+$)	NS/U	Lithuania	NS	Short-term work experience coaches of less than 10 years were not as sensitive to the pressures from the people surrounding them and the stress of work than more experienced coaches. High levels of perceived stress among university coaches were significantly related to burnout.
Nikolaos (2012)	An examination of a burnout	Evaluate burnout in high competition	Quant/Cross-Sectional	170M ($M_{age}=39.2$, $SD=7.4$,	H/HPC	Greece	Kelley's Model of Coach Stress and Basketball	The results showed that the independent variables of coaching level, coaching

	model in basketball coaches	basketball coaches. Examine a model of personal/situational variables, stress perception, and burnout.		CE=4-27)			Burnout, Cognitive-Affective Model of Stress and Burnout		issues, and social support were significant stressors for basketball coaches. This suggest that the variables can be predictors of burnout.
Olusoga, Butt, Hays, & Maynard (2009)	Stress in elite sports coaching: Identifying stressors	Identify the stressors coaches encountered in their experiences coaching world class athletes.	Qual/Cross-Sectional	6M/6F ($M_{age}=47.3$, $SD=7.6$, $CE=6-22$)	NS/E	United Kingdom	Transactional Stress Theory	Bowls, Diving, Equestrian, Field Hockey, Lacrosse, Sailing, Swimming, Table Tennis	Coaches experienced a wide range of stressors relating to ten higher order themes. Conflict within the organization was a key theme.
Olusoga, Butt, Maynard, & Hays (2010)	Stress and coping: A study of world class coaches	Investigate responses to and effects of stress in world class sports coaches. Explore the coping strategies used.	Qual/Cross-Sectional	6M/6F ($M_{age}=47.3$, $SD=7.6$, $CE=6-22$)	NS/E	United Kingdom	Transactional Stress Theory, Cognitive-Affective Model of Stress and Burnout	Bowls, Diving, Equestrian, Field Hockey, Lacrosse, Sailing, Swimming, Table Tennis	Coaches suggested that their negative responses to stress could be projected onto athletes. Structuring and planning were reported as coping strategies but coaches described limited use of psychological skills and avoided stressors that provoked strain.

Olusoga, Maynard, Hays, & Butt (2012)	Coaching under pressure: A study of Olympic coaches	Consider the perceptions of Olympic coaches' ability to cope with multifaceted stressors. Identify the ways in which coaches have developed their ability to coach in stressful situations.	Qual/Cross-Sectional	8M ($M_{age}=43.3$, $SD=6.2$, $CE=5-21$)	NS/OL	United Kingdom	NS	Athletics	Psychological attributes, preparation, and coping at events were factors that coaches perceived as important for successful Olympic coaching. Coaches identified 11 psychological attributes that influenced their ability to coach under pressure. Key themes included coach interaction and simulating Olympic pressure.
Olusoga, Maynard, Butt, & Hays (2014)	Coaching under pressure: Mental skills training for sports coaches	Develop, implement, and evaluate a mental skills training package to enhance coach's ability to coach under pressure.	Mixed/Intervention	5M ($M_{age}=34.2$, $SD=2.8$, $CE=7-18$)	NS/U	United Kingdom	NS	Field Hockey, Rugby Union, Triathlon	Coaches described positive changes in their coaching performance as a result of the intervention. Only a small number of coaches reported statistically significant changes.
Rhind, Scott, & Fletcher (2013)	Organization al stress in soccer	Investigate the organizational stressors experienced by	Qual/Cross-Sectional	10M ($M_{age}=41$, $CE=5-25$)	H/Prof	United Kingdom	NS	Soccer	Coaches identified stressors related to job role, players, managers, support staff, training

	coaches	professional coaches.							environment, away matches, governance, and soccer culture.
Robbins, Gilbert, & Clifton (2015)	Coaching stressors in a division II historically black university	Study coaches at a historically black College/University division II athletic program.	Qual/Cross-Sectional	9M/3F ($M_{age}=37.9$, $CE=2-36$))	H & A/U	United States	Transactional Stress Theory	Baseball, Basketball, Cross Country, Soccer, Volleyball	Three stressor related higher order themes (interpersonal, intrapersonal, and contextual) were reported. Commonly cited stressors were athletes, expectations of others, lack of control, schedule, and job security. Coaches competence and autonomy need satisfaction positively predicted levels of PWB. Coaches PWB positively predicted perceived autonomy support toward their athletes and negatively predicted their perceived controlling behaviors.
Stebbins, Taylor, & Spray (2011)	Antecedents of perceived coach autonomy supportive and controlling behaviors: Coach psychological need satisfaction and well-being	Examine a process model of potential antecedents of perceived coach autonomy supportive and controlling behaviors.	Quant/Cross-Sectional	313M/130F ($M_{age}=41.1$, $SD=14.2$)	NS/RE, CL, R, N, I	United Kingdom	Self Determination Theory	NS	
Stebbins, Taylor, & Spray	The relationship between	Longitudinally explore sports coaches PWB	Quant/Longitudinal	306M/112F ($M_{age}=43.7$, $SD=14.4$)	NS/RE, R, N, I	United Kingdom	Self Determination Theory	NS	Individual differences in positive affect and integration were positively

(2015)	psychological well- and ill-being, and perceived autonomy supportive and controlling interpersonal styles: A longitudinal study of sport coaches	and ill-being as predictors of perceived autonomy supportive and controlling interpersonal styles.								associated with autonomy support. Within-person increases and individual differences in negative affect were associated with increased use of interpersonal control. The indicators of well-being did not predict interpersonal control and the indicators of ill-being did not predict autonomy support.
Stebbing, Taylor, Spray, & Ntoumanis (2012)	Antecedents of perceived coach interpersonal behaviors: The coaching environment and coach psychological well- and ill-being	Explore potential antecedents of coaches perceived autonomy supportive and controlling behaviors.	Quant/Cross-Sectional	154M/41F ($M_{age}=46.2$, $SD=13.3$)	NS/RE, NS CL, R, N, I		Self Determination Theory	NS		Greater job security, opportunities for professional development, and lower work–life conflict were associated with psychological need satisfaction, which related to an adaptive process of PWB.
Surujlal & Nguyen (2011)	Coping under pressure: Strategies for maintaining confidence	Descriptively explore the sources of stress and coping	Quant/Cross-Sectional	76M/12F (CE=6-15)	NS/Prov	South Africa	NS	Soccer		The top three sources of stress were a lack of resources, fixture backlog, and games where the outcome was critical. The

	amongst South African soccer coaches	methods used by soccer coaches.							lowest sources of stress were political interference, physical assaults from players, and substituting a player. Maladaptive coping, emotion management coping, and problem management coping strategies were used by coaches.
Tashman, Tenenbaum, & Eklund (2010)	The effect of perceived stress on the relationship between perfectionism and burnout in coaches	Explore potential relationships pertaining to coaches' burnout by testing two models.	Quant/Cross-Sectional	114M/63F	H & A/C	Florida (United States)	Kelley's Model of Coach Stress and Burnout, The Cognitive-Affective Model of Stress and Burnout, Transactional Stress Theory	Baseball, Basketball, Bowling, Diving, Golf, Rowing, Sailing, Softball, Swimming, Tennis, Track/Cross Country, Volleyball	An indirect effect of self-evaluative perfectionism on burnout through perceived stress was found. Maladaptive forms of perfectionism resulted in more threatening perceptions of stress. Adaptive forms of perfectionism did not result in increased appraisals of stress or burnout.
Thelwell, Weston, & Greenlees (2010)	Coping with stressors in elite sport: A coach perspective	Identify stressors experienced by coaches. Examine the strategies that	Qual/Cross-Sectional	3M ($M_{age}=36.6$, $CE=4-11$)	H & A/E	United Kingdom	Transactional Stress Theory	Cricket, Rugby Union, Soccer	Performance and organizational stressors, and problem-, emotion-, avoidance-, appraisal-, and approach-focused coping dimensions were cited.

		elite-level coaches employ to cope with stressors.							Coping strategies were employed for performance and organizational stressors, rather than being employed for one or the other.
Thelwell, Weston, Greenlees, & Hutchings (2008a)	Stressors in elite sport: A coach perspective	Examine stressors experienced by coaches who work with elite athletes. Explore whether coaches should be viewed as performers.	Qual/Cross-Sectional	7M/4F ($M_{age}=35.7$, $SD=9.6$, $CE=3-10$)	NS/E	United Kingdom	Transactional Stress Theory	Athletics, Cricket, Field Hockey, Golf, Gymnastics, Rugby Union, Sailing, Soccer	Coaches experienced comparable numbers of performance and organizational stressors. Performance stressors were related to their own performance and that of their athletes while organizational stressors related to environmental, leadership, personal, and team factors.
Thelwell, Weston, Greenlees, & Hutchings (2008b)	A qualitative exploration of psychological -skills use in coaches	Examine whether, where, when, and for what purposes coaches use psychological skills.	Qual/Cross-Sectional	13 ($M_{age}=33.8$, $SD=9.7$, $CE=3-13$)	NS/E	United Kingdom	NS	Athletics, Cricket, Field Hockey, Golf, Gymnastics, Rugby, Sailing, Soccer	Self-talk and imagery were cited more frequently than relaxation and goal setting. Reasons for using each psychological skill were specific to either training or competition.

Note. Quant=Quantitative, Qual=qualitative, M=Male, F=Female, M_{age} =Mean Age, SD=Standard Deviation, CE=Coaching Experience, NS=Not Specified, H=Head Coach, A=Assistant Coach, N=National Coach, HPC=High Performance Coach, E=Elite Coach, C=College Coach, Y=Youth Coach, D=Development Coach, R=Regional Coach, RE=Recreational Coach, CL=Club Coach, NE=Non-Elite Coach, U=University Coach, OL=Olympic Coach, I=International Coach, Prof=Professional Coach, Prov=Provincial Coach. A random sample of the quantitative and qualitative studies with their respective quality scores was evaluated and deemed appropriate by the supervisory team. The outcomes of the quality assessment procedures are presented in Tables 3 and 4.

1.2.2. Stressors

Twenty-four studies in the final sample explored stressors with sports coaches. Of these, 14 adopted a qualitative research design. Nine used semi-structured interviews (Didymus, 2016; Durand-Bush, Collins, & McNeill, 2012; Frey, 2007; Knight & Harwood, 2009; Knights & Ruddock-Hudson, 2016; Olusoga *et al.*, 2009; Olusoga, Maynard, Hays, & Butt, 2012; Rhind *et al.*, 2013; Robbins *et al.*, 2015; Thelwell *et al.*, 2008a), two studies used online focus groups (Bruening & Dixon, 2007; Dixon & Bruening, 2007), one study used unstructured interviews (Chroni *et al.*, 2013), and one used diaries (Levy *et al.*, 2009).

These qualitative studies collectively highlight the volume of stressors that coaches may experience during their careers. Many of the studies (Didymus, 2016; Chroni *et al.*, 2013; Levy *et al.*, 2009; Olusoga *et al.*, 2009, 2012; Rhind *et al.*, 2013; Robbins *et al.*, 2015; Thelwell *et al.*, 2008a) refer to performance and organizational

stressors which suggests that these are prominent stressors for coaches. Indeed, Thelwell *et al.* (2008a) reported that elite coaches face near equivalent quantities of performance and organizational stressors. One performance stressor that was referred regularly in the retrieved literature was athlete performance (Didymus, 2016; Chroni *et al.*, 2013; Olusoga *et al.*, 2009, 2012; Rhind *et al.*, 2013; Robbins *et al.*, 2015; Thelwell *et al.*, 2008a). For example, athletes failing to perform to their potential during training and competition seem to be a performance related stressor for elite coaches (Olusoga *et al.*, 2009, 2012). Further to athletes underperforming, another common stressor relating to athlete performance that has been reported in qualitative studies is that of athlete injury. For example, elite coaches have mentioned that they dread key players getting injured (Thelwell *et al.*, 2008a) and that athletes training despite injury is stressful (Didymus, 2016). Other stressors relating to athlete performance that have been reported include athlete coachability, professionalism, attitude, and commitment (Didymus, 2016; Olusoga *et al.*, 2009; Rhind *et al.*, 2013; Thelwell *et al.*, 2008a).

Coaches have also reported performance stressors relating to their own performance (Chroni *et al.*, 2013; Didymus, 2016; Durand-Bush *et al.*, 2012; Frey, 2007; Knights & Ruddock-Hudson, 2016 Thelwell *et al.*, 2008a). For example, elite male coaches placed importance on training sessions running to the high standards that they set and when they perceived that this did not happen, it was appraised as a stressor (Thelwell *et al.*, 2008a). Similar findings have been reported among female development and high-performance coaches (HPC) whereby these individuals set unrealistically high standards for themselves to create an environment in which their athletes would enjoy themselves and excel (Durand-Bush *et al.*, 2012). The findings of other qualitative research included in the final sample with coaches from a variety

of levels (youth to national and elite) suggest that coaches encounter situation specific stressors when performing in training and competition (Chroni *et al.*, 2013). For example, coaches have reported concerns for their own performance as a stressor during both training and competition, whether they had communicated all of their training points as a stressor during training, and the quality of their decisions as a stressor during competition. Other stressors that were reported in the final sample of qualitative studies and pertained to coach performance included self-criticism and interpersonal relations (Chroni *et al.*, 2013; Thelwell *et al.*, 2008a).

In addition to their own performance presumptions, expectations of others (e.g., players parents and the media), including members of the social network, (e.g., players and family) was a prominent stressor for elite, developmental, HPC, and college coaches. External scrutiny from players parents, public, and the media led coaches to feel vulnerable, stressed, and frustrated (Knight & Harwood, 2009; Olusoga *et al.*, 2009). One study highlighted that parents' performance demands on coaches was one of the main stressors that non-elite coaches encountered (Knight & Harwood, 2009). Particularly pertinent in this study was players parents imposing on coaches' personal lives (e.g., by telephoning the coach at weekends) to discuss the performance of their child. Another example relating to the expectations from coaches' social networks was the need to maintain relationships with the management team that they worked work with (Olusoga *et al.*, 2009). Specifically, elite coaches reported that the organization set elite standards during training and competition and unrealistic performance demands to compete at an international standard with an inexperienced squad were stressors (Olusoga *et al.*, 2009).

In addition to performance stressors, organizational stressors appear to be commonly experienced by sports coaches. For example, organizational stressors relating to administration, finances, overload, the environment, organization, leadership, and team factors have each been frequently reported (Bruening & Dixon, 2007; Didymus, 2016; Dixon & Bruening, 2007; Knight & Harwood, 2009; Levy *et al.*, 2009; Olusoga *et al.*, 2009; Thelwell *et al.*, 2008a). For instance, division one female head coaches reported that working extended hours was a significant organizational stressor (Bruening & Dixon, 2007; Dixon & Bruening 2007). A number of the coaches who took part in these two studies had infant children and felt an additional impact from their work hours relating to balancing the roles as a mother and coach. In a longitudinal qualitative study, Levy *et al.* (2009) examined the organizational stressors that were experienced by one elite male coach. The authors reported that administration related to meetings with management, organizing materials, and attending to e-mails took away from the time that the coach had available to work with the athletes. Coaches have highlighted that to achieve success in their coaching, they have to make sacrifices that result in concerns for their relationship status (cf. Didymus, 2016). Other organizational stressors that are experienced by coaches relate to competition preparation, isolation, and conflict with others (Didymus, 2016; Knight & Harwood, 2009; Levy *et al.*, 2009; Olusoga *et al.*, 2009; Thelwell *et al.*, 2008a). To expand on conflict with others, elite coaches perceived that without additional social support from their social network, such as instrumental financial support, that they could not achieve the expectations of success (Olusoga *et al.*, 2009). For instance, Olympic and international level coaches reported that a lack of instrumental support in terms of a shortage in finances from their organization meant that they could not obtain the right equipment needed to

succeed (Didymus, 2016). It appears, therefore, that organizational stressors influence both male and female coaches who are working at a variety of coaching levels and that organizational stressors can have negative implications for coaches in terms of their work-life balance, their personal lives, relationship status, and their ability to fulfill their coaching roles.

Research in the final sample have also discussed stressors in relation to coaches contextual (e.g., schedule, lack of resources, job security, coach age and experience, level of competition, success of the program), interpersonal (e.g., athletes, expectations of others, administration, budget), and intrapersonal (e.g., performance outcome, lack of control) experiences (Frey, 2007; Robbins *et al.*, 2015). Two examples of contextual stressors that have been reported in qualitative studies are coaches age and years of coaching experience. Frey (2007), for example, indicated that male and female NCAA division one college coaches age and or years of experience in managing stressors affected their perceptions of stress. Coaches indicated that increased age or years of coaching experience diminished their perceived stress. Two common interpersonal stressors that were reported by division two university coaches related to unequal or inadequate funding and a lack of control over athlete performance (Robbins *et al.*, 2015). The results of this review so far highlight that coaches experience a number of performance stressors, in particular, those relating to athlete performance, athlete injury, coach performance, expectations, and social support.

Some of the qualitative studies included in the final sample investigate some of the factors underpinning stressors and respective outcomes. For example, Frey (2007) highlighted that stressors can have possible energizing effects for division

one college coaches. For instance, coaches explained how learning from stressors could help them prepare for the future. Coaches acknowledged that there would always be times when they experienced stressors and that perceiving them as positive motivated them to learn and develop. Whether a coach responds to stressors positively or negatively, they may be influenced by the situational properties that underpin stressors. With a sample of Olympic and international level coaches, Didymus (2016) reported that stressors relating to athlete concerns, coaching responsibilities, expectations, finance, governance, interference, organizational management, preparation, and selection were underpinned by seven situational properties: ambiguity, duration, event uncertainty, imminence, novelty, temporal uncertainty, and timing in relation to life cycle. Each of these properties appears to influence coaches' appraisals and, therefore, can determine the outcomes of coaches' stressful experiences (Didymus, 2016). Collectively, the findings of the qualitative studies included in this review focus on the stressors that coaches experienced and suggest they encounter a range of stressors that may be underpinned by situational properties. The findings reported here suggests that coaches' stressors experience can be categorized into organizational, performance, contextual, interpersonal, and intrapersonal factors.

Ten of the 24 papers that examined stressors with sports coaches used quantitative methods. The Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) was used in six of these studies (Georgios & Nikolaos, 2012; Kelley, Eklund, & Ritter-Taylor, 1999; Knight *et al.*, 2013; Malinauskas, Malinauskiene, & Dumciene, 2010; Nikolaos, 2012; Tashman *et al.*, 2010) and the Coaching Issue Survey (Kelley & Baghurst, 2009) was deployed in two studies (Kelley, 1994; Kelley *et al.*, 1999). Hudson, Davison, and Robinson (2013), Judge *et al.* (2015), and

Kellman and Kallus (1994) each used multiple questionnaires to assess stressors among coaches, some of which were not sport specific. In support of the findings from qualitative research, quantitative research has also highlighted that coaches encounter a variety of stressors (e.g., lack of social support, role based and task-based responsibilities, level of coaching, demographics, salary, contract, working hours, competition, and perfectionism). These stressors have been shown to be significantly associated with increased perceived stress among coaches (Hudson *et al.*, 2013; Judge *et al.*, 2015; Kellman, & Kallus, 1994; Knight *et al.*, 2013; Tashman *et al.*, 2010). To expand on a lack of social support, Knight *et al.* (2013) outlined that a lack of social support was related to higher perceptions of stress among coaches. It was highlighted that coaches with lower levels of social support tended to have greater levels of perceived stress. This was echoed by Judge *et al.* (2015) who found that social support played a significant role in the experience of task-based stress among college coaches. This was illustrated by task-based stress decreasing as social support increased. Overall, the quantitative research on social support with coaches highlights that social support is a frequently reoccurring important variable in the perceptions and experiences of stressors.

The research in this area also highlights that the stressors encountered by coaches may differ between genders. For instance, Kelley and colleagues (1994, 1999) indicated that both male and female collegiate tennis coaches who reported more coaching stressors and were lower in hardiness were more inclined to experience higher levels of perceived stress. However, female coaches were found to have a higher tendency than male coaches to experience stressors. In addition, college, university, and national male coaches have reported demographic factors, job-related characteristics, and contracts as stressors (Knight *et al.*, 2013), while

Hudson *et al.* (2013) reported that competition was a significant stressor for the non-elite coaches in their study. On competition days, coaches' alpha-amylase activity, subjective stress, arousal, and unpleasant emotions have been shown to be significantly higher than on practice days (Hudson *et al.*, 2013). Other quantitative research with sports coaches has found that increased quantities of stressors can lead to burnout (Georgios & Nikolaos, 2012; Malinauskas *et al.*, 2010; Nikolaos, 2012). More specifically, coaching issues (e.g., understanding athletes' emotional responses and motivations, budget limitations hampering recruitment), hardiness, coaching level, and social support have been found to moderate perceived stress and, in turn, influence national, college, and HPCs experiences of burnout (Georgios & Nikolaos, 2012; Kelley *et al.*, 1999; Nikolaos, 2012). Kelley *et al.* (1999) found that hardiness and coaching issues contributed most substantially to the prediction of perceived stress in college tennis coaches. In another study, Nikolaos (2012) found social support to be one of the most important predictors of perceived stress in high performance basketball coaches. Lower levels of social support correlated with higher levels of perceived stress and burnout. Overall, this shows that coaching issues, hardiness, coaching level, and a lack of social support can lead to higher levels of stress and therefore, burnout in sports coaches.

The findings of other quantitative research (Malinauskas *et al.*, 2010) support the assertion that high levels of perceived stress among university coaches are significantly related to burnout. Interestingly, coaches with 10 years or more experience were significantly more likely to experience burnout than coaches with less than 10 years coaching experience (Malinauskas *et al.*, 2010). It was also found that the level of burnout between male and female coaches did not significantly differ. Yet, male coaches were found to have a tendency to burnout more frequently

than female coaches (Malinauskas *et al.*, 2010). In another study, Tashman *et al.* (2010) suggested that maladaptive forms of perfectionism resulted in more threatening perceptions of stress, which could lead to the experience of burnout. However, adaptive forms of perfectionism did not seem to contribute to burnout. Collectively, the quantitative studies that have discussed stressors among coaches suggest that greater exposure to stressors can lead to increased stress and therefore have the potential to result in burnout symptoms. More specifically, increased coaching issues and perfectionism and a lack of hardiness, coaching level, and a lack of social support are all stressors that can lead to increased burnout. Further, the quantitative research suggests that female coaches are liable to experience more stressors than male coaches, yet, male coaches are likely to experience burnout more frequently than their female counterparts.

1.2.3. Coping

A total of 17 papers studied coping with coaches to reduce the negative outcomes of stressors. The ongoing debate about how to categorize coping presents itself here and makes it difficult to compare, contrast, and synthesize the findings of studies that were included in the final sample. To illustrate briefly, some researchers (e.g., Frey, 2007) have referred to cognitive (e.g., altering thought processes, perspective taking), emotional (e.g., social support, visualization), and behavioral (e.g., exercise, reading) coping strategies, while others (e.g., Thelwell, Weston, & Greenlees, 2010) have used problem- (e.g., talking with others), emotion- (e.g., self-talk), avoidance- (e.g., consuming alcohol), appraisal- (e.g., reflection), and approach-focused categories (e.g., goal-setting). In other research, Didymus (2016) viewed coping as an adaptive process and used seven families of coping (dyadic

coping, escape, information seeking, negotiation, problem solving, self-reliance, and support seeking) that each relate to a different function in adaptation to categorize the strategies that coaches used. In the context of the doctoral thesis and the wider academic community, this debate and the lack of agreement on the way to categorize coping, makes it difficult to classify social support. For example, social support has been included under emotional- (e.g., Frey, 2007) and problem-focused coping (e.g., Thelwell *et al.*, 2010), as well as a separate family of coping (e.g., Didymus, 2016). A full discussion of the ways in which coping can be categorized is beyond the scope of this systematic review but interested readers can refer to Skinner *et al.* (2003) for a thorough discussion.

Qualitative research methods were used in 13 of the 17 studies that were retrieved and focused on coaches' ways of coping. Eight studies used semi-structured interviews (Didymus, 2016; Durand-Bush *et al.*, 2012; Frey, 2007; Knights & Ruddock-Hudson, 2016; Lundkvist *et al.*, 2012; Olusoga *et al.*, 2010, 2012; Thelwell *et al.*, 2010), two used unstructured interviews (Bloom, Durand-Bush, & Salmela, 1997; Thelwell, Weston, Greenlees, & Hutchings, 2008b), two used online focus groups (Bruening & Dixon, 2007; Dixon & Bruening, 2007), and one used a diary (Levy *et al.*, 2009). One of the earliest qualitative studies in this area explored coaches use of competition routines as a way to cope with stressors (Bloom *et al.*, 1997). The results highlighted that expert team sports coaches used pre-competition (e.g., preparing and rehearsing a game plan) and post-competition routines (e.g., emotional control) to try and reduce the effects of stressors and minimize anxiety on competition days (Bloom *et al.*, 1997). One of the main aims for a pre- or post-match routine that was highlighted in this study was maintenance of emotional control, which was achieved principally by going for a walk or

releasing frustrations by talking to assistant coaches. One other way in which coaches can control their emotions is via the use of self-talk (Levy *et al.*, 2009; Thelwell *et al.*, 2008b; Olusoga *et al.*, 2010). Coaches have been reported to use self-talk as a psychological skill during stressful experiences to remain positive, as a motivational tool, for self-affirmations, and to tell oneself that they are lucky to be doing a job that they enjoy (Levy *et al.*, 2009; Olusoga *et al.*, 2010). The findings of other qualitative research show that coaches may use various other psychological skills to cope with stressors (e.g., imagery, relaxation, and goal setting; Levy *et al.*, 2009; Thelwell *et al.*, 2008b; Olusoga *et al.*, 2010). More specifically, elite coaches appear to use self-talk and imagery more regularly than relaxation and goal setting before, during, and after training and competition to help control their emotions, to stay focused on the task, and to imagine how difficulties would be overcome (Thelwell *et al.*, 2008b).

Social support was reported by studies in this review to control emotions and cope with stressors. Levy *et al.* (2009) reported social support as a frequently cited coping strategy used by an elite coach to alleviate the negative outcomes of stressors. More specifically, social support for the elite coach came in the form of seeking assistance from players and other coaches. In terms of social networks, coaches have cited family, friends, assistant coaches, mentors, and other staff members as valuable avenues to use when coping with stressors (Bruening & Dixon, 2007; Dixon & Bruening, 2007; Frey, 2007; Olusoga *et al.*, 2010; Thelwell *et al.*, 2010). For instance, family members have been shown to be important sources of support for division one female head coaches during unexpected situations (e.g., an unexpected tournament; Bruening & Dixon, 2007; Dixon & Bruening, 2007). Furthermore, male Olympic level coaches reported that having friends and family outside of sport that

offered emotional and instrumental support was important because it allowed them to distance themselves from coaching and achieve a sensible work-life balance (Olusoga *et al.*, 2010). This helped the Olympic coaches to relax and reduce the negative effects of stressors. Collectively, the studies that have discussed social support to cope with stressors propose the importance of a strong social network that provides social support resources to assist during stressful periods.

To expand on support from other coaches, mentors, and staff, NCAA division I female coaches reported instrumental support they had received from other coaches when her son was taken to hospital during a summer camp (Bruening & Dixon, 2007). The interviewee mentioned how an assistant coach covered her coaching hours at the camp so that she could be at the hospital with her son. The results of other research show that NCAA division one male and female coaches find that having an assistant coach who they perceive to be calmer than themselves can help to manage the negative outcomes of stressors through emotional support, particularly during training and or competitions (Frey, 2007). Informational support in the form of guidance from performance analysts and assistance from other coaches and players were sources of social support for an elite male coach over a 28-day period to help cope with stressors and enhance coach development (Levy *et al.*, 2009). A rugby union elite coach from the U.K. cited using informational social support in the form of a mentor to help cope with conflicting views on training ideas where he worked (Thelwell *et al.*, 2010). Discussing the issue with the mentor allowed the coach to develop an appreciation of the other coaches' views whilst strengthening his own reasoning on the training ideas.

In addition to competition routines, other psychological skills, and social support, many of the qualitative studies retrieved during this review reported that coaches may choose to escape from or avoid coaching and or stressful situations as a way to cope with stressors (Bruening & Dixon, 2007; Didymus, 2016; Durand-Bush *et al.*, 2012; Frey, 2007; Levy *et al.*, 2009; Olusoga *et al.*, 2010; Thelwell *et al.*, 2010). For example, a sample of female college level head coaches from the United States of America reported that escaping from coaching (e.g., by having a massage or consuming alcohol) helped them to relax and switch off (Bruening & Dixon, 2007). In another study, Durand-Bush *et al.* (2012) reported that Canadian female coaches who were working in competitive development or high-performance coaching contexts sometimes isolated themselves as a means to cope with stressors. High level male coaches from the U.K. have also been shown to use similar escape-related coping strategies during stressful episodes (Didymus, 2016; Levy *et al.*, 2009; Olusoga *et al.*, 2010). When considered alongside the cultural contexts of the aforementioned studies, the findings collectively suggest that male and female coaches who are working at various levels of coaching and have different cultural backgrounds may rely on escape and or avoidance-related coping strategies during their coaching careers.

With reference to how effective these and other coping strategies are in managing the negative outcomes of stress, only one qualitative study (Levy *et al.*, 2009) was retrieved during this review that assessed coping effectiveness among coaches. Levy *et al.* (2009) conducted a diary based longitudinal case study with an elite male coach and found that his five most frequently cited coping strategies were communication, preparation, planning, social support, and self-talk. Each of these five groups of coping strategies appeared to be moderately effective over the 28-day

study period. However, Levy *et al.* also reported that the coaches mean coping effectiveness scores declined over time and that effectiveness was lowest when the coach experienced a high volume of stressors. While not explicitly focused on coping or coping effectiveness, Lundkvist *et al.* (2012) reported that coaches who could not cope with the performance culture in elite sport (i.e., had a lack of effective coping resources) and who lacked the tools to enhance recovery were particularly susceptible to burnout. This highlights the importance of assessing coping effectiveness to manage the negative outcomes of stress and to minimize the potential for coaches to experience burnout symptoms.

Turning to the studies that used quantitative methods to assess coping, my search strategy yielded two relevant studies that met the inclusion criteria. Of these, one study was conducted with student coaches who were enrolled on a postgraduate coaching course in Poland (Kulmatycki & Bukowska, 2007) and the other was conducted with a sample of provincial South African coaches (Surujlal & Nguyen, 2011). The scarce quantitative research in coping and the poor quality of the available evidence (see Table 3 for details) suggests that these findings should be interpreted with a degree of caution. Specifically, Kulmatycki and Bukowska (2007) used their own Relaxation-Concentration Exercises Questionnaire to assess differences in student coaches' reactions to experiences of relaxation exercises in relation to sport type (e.g., team, individual) and gender, however at the time of this review, this measure had not been validated. Although the study claims that proneness to relaxation was related to both the type of sport and gender of the coach, the majority of findings were non-significant. In the other quantitative study, Surujlal and Nguyen (2011) adapted an invalidated questionnaire that had been designed from a previous study (Wolfson & Neave, 2007) and found that coaches used

maladaptive (e.g., ignoring the situation), emotion-focused (e.g., eating or taking exercise), and problem-focused (e.g., planning) coping strategies to reduce the negative outcomes of stress. These coaches used problem-focused coping more often than maladaptive and emotion-focused coping.

Turning to mixed methods studies that have examined coping among coaches, two were retrieved by the search strategy (Longshore & Sachs, 2015; Olusoga, Maynard, Butt, & Hays, 2014). Olusoga *et al.* (2014) developed, implemented, and evaluated a mental skills training (MST) program with five university coaches aimed at enhancing coach's ability to cope with stressors. It was reported that coaches self-reported ability to relax when experiencing stressors was significantly higher post-intervention. Second, coach's self-confidence was significantly higher post-intervention and they used significantly less self-blame coping strategies. Finally, while other observed variables (concentration, cognitive anxiety, motivation, and anxiety/worry management) showed no statistically significant pre- and post-intervention differences, qualitative social validation data highlighted that the MST program was practically useful for the coaches who took part. They perceived that it helped them to cope with stressors and increase performance. In the other mixed methods study, Longshore and Sachs (2015) assessed 20 division one college coaches use of mindfulness exercises as a coping strategy. This was by means of questionnaires (Mindful Attention Awareness Scale, State and Trait Anxiety Inventory, Brunel Mood Scale) and semi-structured interviews. The results highlighted that the 12 coaches who were trained in an initial 90-minute group training session followed by a six-week home program of mindfulness techniques to cope with stressors were significantly lower in trait anxiety, perceived stress, and adverse emotions than prior to the program. The eight

non-trained coaches that were in the control group and received no training showed no significant differences in anxiety, perceived stress, and adverse emotion scores. However, the results also showed that mindfulness levels were not significantly different over time or between groups. Taken together, the findings of qualitative, quantitative, and mixed-methods research highlight that coping strategies that are aimed at solving a stressor (i.e., problem-focused) are commonly used among sports coaches. The results of this review also suggest that some coping strategies relating to controlling emotions (e.g., relaxation, mindfulness) may be suitable to be taught to coaches during interventions. The results of the mixed-methods studies should also be taken with caution due to the lack of available and quality evidence in this area.

1.2.4. Well-Being

The search strategy yielded no qualitative articles and five quantitative articles that examined PWB among sports coaches with three studies using a cross-sectional research design (Alcaraz *et al.*, 2015; Stebbings *et al.*, 2011; Stebbings, Taylor, Spray, and Ntoumanis, 2012) and two utilizing a longitudinal approach (Bentzen, Lemyre, & Kenttä, 2016; Stebbings, Taylor, & Spray, 2015). These five studies measured PWB using one or both of the following questionnaires: The Positive and Negative Affect Scale (Watson, Tellegen, & Clark, 1988) and the Subjective Vitality Scale (Ryan & Frederick, 1997). In one of the earliest studies on coaches' PWB that was retrieved during this review, Stebbings *et al.* (2011) demonstrated that coaches' competence and autonomy need satisfaction positively predicted their PWB as measured by positive affect and subjective vitality. In turn, coaches' PWB positively predicted autonomy supportive behaviors and negatively predicted controlling behaviors towards athletes. In a distinct but related study,

Stebbing *et al.* (2012) highlighted that greater job security, opportunities for professional development, and lower work-life conflict were associated with psychological need satisfaction in coaches, which, in turn, were related to PWB and autonomy supportive behaviors toward athletes. The opposite was found when coaches experienced higher work-life conflict and fewer opportunities for development: these factors were associated with maladaptive processes of thwarted psychological needs, psychological ill-being, and controlling interpersonal behavior. More recently, other authors (Alcaraz *et al.*, 2015) have adopted similar study designs to those used by Stebbings and colleagues to explore PWB among team sport coaches. The results of this study suggest that coach's motivation mediates relationships from relatedness need satisfaction and basic psychological need thwarting to coaches' PWB (Alcaraz *et al.*, 2015). Collectively, the findings of these three studies provide preliminary evidence that three conditions are necessary for coaches to be psychologically well: basic psychological needs satisfaction, lack of basic psychological needs thwarting, and self-determined motivation.

Turning to the longitudinal studies that examined coach's well-being, Stebbings *et al.* (2015) explored coaches' psychological well- and ill-being as predictors of their perceived autonomy supportive and controlling interpersonal styles over an eleven-month period. They found that PWB was positively associated with perceived autonomy support both within and between coaches. In the most recent longitudinal study on coaches' PWB, Bentzen *et al.* (2016) assessed whether the SDT process model could be used to understand burnout and well-being in HPC for a variety of sports over the course of a competitive season (4 to 10 months). The results highlight that coach's well-being decreased and symptoms of burnout increased over the season. More specifically, changes in the perceived environment

led to changes in psychological need satisfaction, which, in turn, contributed to changes in autonomous motivation and in well-being and burnout. Taken together, the findings of the five studies suggest that basic psychological needs satisfaction contributes to heightened PWB. In addition, coaches who report high PWB were more likely to exhibit autonomy supportive behaviors that contribute to adaptive environments for those who are under their instruction. The research that was retrieved in this review and focused on coach well-being used quantitative methods and adopted an SDT (Deci & Ryan, 2000) perspective to explore PWB. Emotional and social well-being were not explored with coaches.

1.3. Discussion

The purpose of the study was to conduct a systematic review of stressors, coping, and well-being among sports coaches. Thirty-eight studies were included in the final sample. The findings highlighted that coaches encounter a variety of organizational, performance, contextual, interpersonal, and intrapersonal stressors. The review also demonstrates that coaches attempt to cope with these stressors using strategies that can be categorized according to the intention and function of coping (emotion-, problem-, appraisal-, avoidance-, approach-focused) or as coping families (dyadic coping, escape, information seeking, negotiation, problem solving, self-reliance, support seeking). Social support seems to be an important way for coaches to cope with stressors. On the other hand, a lack of social support and feeling isolated can be a stressor for coaches. With reference to well-being, the search strategy yielded five quantitative studies that explored PWB. The findings of these studies highlight that increased PWB for coaches contributes to the provision of positive (i.e., autonomy supportive) environments for athletes.

Stressors with sport coaches returned the most manuscripts within the retrieved literature and highlighted that coaches encounter a variety of stressors (e.g., organizational, performance, contextual, interpersonal, and intrapersonal) that are similar to those experienced by athletes (see e.g., Didymus & Fletcher, 2012; Olusoga *et al.*, 2009; Thelwell *et al.*, 2008a). The majority of sport research has categorized coping into organizational and performance stressors (e.g., Olusoga *et al.*, 2009; Tamminen & Holt, 2010; Thelwell *et al.*, 2008a; Woodman & Hardy, 2001) and include contextual, interpersonal, and intrapersonal within the aforementioned categorizations. However, for coaches, stressors relate not only to their own performance but also that of their athletes, to organizational factors that include a complex network of other people (e.g., athletes, parents, other coaches, support staff), and to personal factors that influence life at work and at home. The myriad of stressors reported by the studies in this review reflects the individual and complex nature of coaches' stress transactions and highlights the importance of considering coaches experiences as part of broader social structures.

Turning to the findings that relate to coaches coping, the majority of research published in this area refers to some or all of the most widely used categories of coping: emotion-, problem-, avoidance-, and approach-focused coping. There are, however, inconsistencies and criticisms (Kaiseler, Polman, & Nicholls, 2009; Nicholls & Polman, 2007) in the ways that coping is grouped into these five categories with one recent study (Didymus, 2016) criticizing this categorization approach for holding limited practical significance. Another option for categorizing coping is to group strategies into coping families that each have a different role in adaptational processes (Skinner *et al.*, 2003). With recent research introducing these coping families to both sports coaching (Didymus, 2016) and athlete contexts

(Didymus & Fletcher, 2014; Tamminen & Holt, 2010), researchers may start moving away from the traditional classifications towards the use of adaptationally functional families. In doing so, coping can be understood from a developmental perspective, which may be beneficial for researchers and practitioners alike. The lack of agreement on coping categorizations is a key limitation to progress knowledge in this area. The results of this review that relate to coping are similar to those found among athletes (see, for a review, Nicholls & Polman, 2007) in that problem- and emotion-focused coping are used most frequently (e.g., Frey, 2007; Levy *et al.*, 2009; Surujlal & Nguyen, 2011). Problem-focused coping, for example, may be more commonly deployed by coaches if they are highly conscientious (O'Brien & DeLongis, 1996) or if the stressors experienced are perceived to be within the individual's control (Folkman, 1991). The thoughtful nature of coaches' deployment of coping, aligns with the coping effectiveness literature, in particular, that of the goodness-of-fit coping model (Folkman, 1991).

The goodness-of-fit model has received the most attention in the literature (e.g., Anshel, 1996; Poliseo & McDonough, 2012) compared with the automaticity of coping model (Gould, Eklund, & Jackson, 1993) or the choice of coping strategy (Eubank & Collins, 2000). The goodness-of-fit model stipulates that the effectiveness of coping depends on the demands and constraints of the situation (Folkman, 1992). For instance, problem-focused strategies are most effective when stressors are perceived as controllable. Alternatively, when stressors are perceived as uncontrollable, emotion-focused strategies are more effective (Folkman, 1991). In the final sample of the review, only one study examined coping effectiveness (Levy *et al.*, 2009) and found partial support for the goodness-of-fit model. Levy and colleagues (2009) highlighted that a coaches' mean coping effectiveness declined

over time and that effectiveness levels were lowest when the coach experienced a high volume of stressors. Due to only one study found examining the effectiveness of coping strategies with coaches, more research is needed to determine the effectiveness of coping strategies for coaches who are working in different performance contexts (e.g., elite, regional, non-elite coaches). This is a potentially important area of study with coaches to allow for a more comprehensive understanding of coping responses, and therefore, facilitate interventions to help coaches cope more effectively with stressors.

A prominent and reoccurring factor that was frequently referred to in the studies in this review was social support (e.g., Judge *et al.*, 2015; Lundkvist *et al.*, 2012; Olusoga *et al.*, 2010; Rhind *et al.*, 2013). In total, 20 of the 38 studies in the final sample reported social support as either a stressor (e.g., lack of trust and support between coaches) or a means to cope with stressors (e.g., support to look after coaches' children to accommodate unsociable working hours). The research in the final sample highlighted that when coaches use social support to cope with stressors (e.g., training drills and covering coaching sessions) and suggest it can have positive PWB effects. It seems that social support can have buffering effects on stressors (Cohen & Wills, 1985). For example, in Frey's (2007) study with NCAA college coaches, it was reported that having a supportive assistant coach made the coaches feel calmer and therefore buffer the negative effects of stressors.

Interestingly, for coaches to achieve success in the profession, they perceived that they may have to make sacrifices with the relationships in their social networks.

Surprisingly, however, there appears to be no published research that aimed to focus specifically on this concept among coaches. For example, whilst Knights and Ruddock-Hudson (2016) did examine social support among coaches, the majority of

the results section focuses on occupational stress and there is limited data specifically related to social support.

With regards to what sports coaches use for support, some studies (e.g., Bruening & Dixon, 2007; Dixon & Bruening, 2007; Frey, 2007; Olusoga *et al.*, 2010; Thelwell *et al.*, 2010) have reported the different individuals that coaches may turn to help cope with stressors (e.g., friends, family, assistant coaches). However, these studies do not focus on social networks or patterns of social support among coaches. This overlooks the importance of social networks in coping with stressors and increasing PWB. Understanding the structure of coaches' social networks is an important area that requires further investigating as it can highlight who or what coaches use for social support and therefore provide opportunities to identify specific areas where they may need additional support to cope with stressors in order to improve performance and PWB. Chapter three of this thesis will aim to fill this gap in the literature by exploring the social networks of sports coaches. Visual diagrams of the social network structures will be provided alongside coaches' experiences of using their social network members. Once the members of the support network are understood, the types of support that the network offers, and the perceived satisfaction of the support available, need to be explored. Whilst research partially explores when coaches use social support to cope with stressors, there is no research that investigates this phenomenon with coaches in-depth. For example, exploring social support resources or functions in relation to PWB or coach development. Understanding the types of social support used by coaches and the situations that they use resources for, can help reduce the negative effects of stressors and increase coach performance (Rees & Hardy, 2004) by considering the appropriate types of social support coaches require that are relevant to the specific situation. This

program of research will aim to provide such exploration of social support resources (chapters three and four) and functions (chapters four and five).

Regarding well-being among sports coaches, five studies were retrieved that examined PWB. Each of these studies were underpinned by SDT (Deci & Ryan, 2000) and adopted a quantitative research design. The studies suggest that basic psychological needs satisfaction, lack of basic psychological needs thwarting, and self-determined motivation are needed for coaches to experience PWB. In addition, one study (Bentzen *et al.*, 2016) suggested that coaches' PWB decreases over the course of a competitive season. Despite these results, further investigation into coaches' PWB is warranted. This is surprising given the noteworthy implications that PWB has for coaches (e.g., burnout) and their athletes (i.e., training environment). In particular, it is recommended that scholars explore other types of well-being (e.g., emotional and social well-being) with sports coaches to develop a complete understanding of coaches' well-being. In addition, where possible, longitudinal research should be conducted to understand how coaches' well-being may change over time. Conceptual and definitional issues of well-being research have applied weak theoretical rationales and have not distinguished between well-being at different levels (e.g., global or context-specific; Lundqvist, 2011). This may be because research on well-being is often framed by vague and inconsistent conceptualizations (Lundqvist, 2011). Lundqvist's findings, coupled with the results from this review show that the literature on coach's well-being is in its infancy, and points to a pertinent opportunity for researchers.

The findings of this review highlight that HPCs (i.e., coaches who are coaching highly skilled athletes in a sport environment that focuses primarily on performance; Erickson, Côté, & Fraser-Thomas, 2007) have received extensive

research attention when compared to coaches who are transitioning into elite coaching (e.g., UEFA B qualified soccer coaches) or operating at development or youth levels, for example. The focus on HPCs may be because a fine line exists between success and failure in more competitive environments and, as such, HPCs often experience considerable pressure from media, fans, and their organization (Smith & Hodge, 2014). Given that the gap between success and failure is so small for HPCs, and that coaches are often not afforded much time to succeed, it is not surprising that HPCs have been the focus of research attention. Nonetheless, there remains a notable absence of research with other coaching performance contexts (e.g., non-elite coaches). To maintain and enhance sport participation, retain coaches, and develop higher quality HPCs, more attention should be dedicated to coaches who are working at other coaching performance context. However, before research fully explores this area, it is noticeable that there are inconsistencies in how coaching performance levels are described in the literature. In this review, 15 ways of defining coaching levels were identified ranging from Olympic to non-elite. These included definitions defined by performance (e.g., Olympic, elite, and HPC), whilst others were defined by context (e.g., youth). To gain a more homogenous research area, there needs to be more consistency in the terminology used when categorizing coaching and performance levels. This thesis will aim to respond to the absence of research on different contexts identified in this review by exploring the experiences of coaches across different performance (e.g., level one, level two, level three coaching qualifications) contexts throughout the program of research. In particular, chapter five aims to explore the experiences of female coaches in a UEFA B context.

In regards to theories that underpinned the research, fifteen of the studies included in the final sample did not use a theoretical framework to underpin the research. Of the studies that did use theoretical frameworks, the two most commonly used theories were the cognitive-affective model of stress and burnout (Smith, 1986) and transactional stress theory (Lazarus, 1999; Lazarus & Folkman, 1984). Both of these theories are potentially suitable theoretical frameworks to assess stress among sports coaches. However, with research heading towards a more adaptational approach to stressors and coping, transactional stress theory and the cognitive-motivational-relational theory of stress and emotions (Lazarus, 1999) offer promise for interested researchers. Two further notable discussion points relate to the participants who were sampled in the reviewed studies and to the methods and study designs that have been adopted. Turning first to the sampled coaches, 22.5% of the sampled participants were female and only three studies (Bruening & Dixon, 2007; Dixon & Bruening, 2007; Durand-Bush *et al.*, 2012) focused solely on female coaches highlighting that the experiences of female coaches is currently under researched. The limited research that has explored stressors between genders suggests that male and females may experience different stressors (Durand-Bush *et al.*, 2012; Kelley, 1994; Kelley *et al.*, 1999) and may cope with these stressors in a different way (Bruening & Dixon, 2007; Kulmatycki & Bukowska, 2007). Currently, females make up 30% of the coaching workforce in the U.K. (UK Coaching, 2015) and UK Coaching are working to ensure that females comprise 40% of the coaching population and 30% of national team coaches by 2020 (UK Coaching, 2015). To achieve this aim and work towards a more diverse and inclusive coaching workforce, a greater understanding of female coaches stress experiences and PWB is needed. A purpose of this thesis is to advance knowledge in this area by exploring the

experiences of female coaches (see chapters three, four, and five). In particular, chapter five will aim to do this by focusing solely on female coaches' experiences of social support.

Referring to the methods that were used in the reviewed studies, half of the papers (50%) used qualitative approaches. This is likely due to the complex and individualized nature of stress (Lazarus & Folkman, 1984) and the appropriateness of qualitative methods for collecting rich data. However, quantitative methods were also used frequently to assess stressors and coping with coaches. This balance of qualitative and quantitative research methods is a strength of the research reviewed. However, the majority of reviewed studies (78.9%) employed cross-sectional designs, which is surprising given the value of longitudinal research for detecting changes in phenomena over time. Researchers should, therefore, consider making further use of longitudinal study designs when developing future projects on coaches stressors, coping, and well-being (e.g., Levy *et al.*, 2009; Thelwell *et al.*, 2010). This program of research will aim to address some of these methodological limitations by using a combination of different qualitative methods to explore male and female coaches social networks, resources, and functions.

Turning to the implications of this review, several noteworthy applications for coaches, practitioners, NBGs, and researchers are apparent. The findings on stressors that coaches experience can inform organizations and practitioners about the possible situations when coaches may experience increased stress, such as when registering players due to higher levels of administration. This means that additional support can be provided (e.g., administration personnel) during these periods to help coaches perform at a higher level. Furthermore, the knowledge on how individuals cope with stressors can help to facilitate applied interventions that focus on

developing ways of coping. For example, NGBs could include continuous personal development (CPD) events that include information for coaches on different ways of coping with stressors, such as building an effective social network. Findings from the review highlighted the inconsistent categorizations of coaching levels. For example, the terms ‘high performance’ and ‘national’ have been used to ascribe coaches that work with athletes at the national level. Similar issues have been reported when defining elite athletes (Swann, Moran, & Piggott, 2015). This can cause confusion among researchers about the appropriate criteria to use and threatens the validity of the research. For example, it is difficult to draw valid conclusions and provide applied implications from studies in which coaches have been defined using different criteria. Therefore, it may be appropriate for researchers to adopt a coaching framework, such as the ICCE framework (International Council for Coaching Excellence, 2013), to provide guidance when defining coach expertise.

With regards to coaching levels and gender, more balanced research on the stressors, coping, and well-being of sports coaches from a variety of levels and genders will allow NGBs to maintain and enhance sport participation, retain coaches, and develop higher quality HPCs. In turn, increasing athlete performance. Researchers should continue to explore stressors, coping, and well-being among coaches with a particular emphasis on those areas that are highlighted as underexplored in extant literature. Namely, the ways in which coaches appraise stressors, the effectiveness of coaches coping efforts, social support as a coping strategy, and coaches’ PWB. The importance of social support in coaches’ stressor experiences highlights that future research is required that focuses solely on the social networks, resources, and functions. Research of this nature would help to inform coaches, practitioners, and organizations about how social support can hinder

and or be used to assist coaches in their varied roles. Such endeavors would also help to create coaching environments that reduce the occurrence and impact of stressors, maximize coaches coping potential, and increase PWB.

1.4. Study Reflections

At the beginning of the PhD, the thesis was originally centered on occupational stress, health, and well-being among sports coaches. After initial readings had taken place in the research area and it was found that no previous systematic review had been published, it was clear that conducting a systemic review would be beneficial to collate and synthesis the research in the area. During the systematic review process and through additional reading, common themes occurred relating to coaches feeling isolated (e.g., Knowles *et al.*, 2006; Olusoga *et al.*, 2009, 2010) and the potential important effects of social support on coaches' performance (e.g., Frey, 2007) and PWB (e.g., Judge *et al.*, 2015; Lundkvist *et al.*, 2012). This led to the thesis focusing on social network structures, social support resources, and social support functions to provide an in-depth understanding of social support with sports coaches. This research can help coaches to feel supported in an often isolated role and comfortable using social support during stressful situations.

During the process of determining the keywords for the systematic review, there were discussions with the supervisory team about the inclusion of 'athletic trainer' as a search term. The literature described the role of an athletic trainer similar to that of a coach (e.g., Hendrix, Acevedo, & Hebert, 2000). As a result, athletic trainer was initially included as a search term, however, after additional reading into the requirements of this profession, it was concluded that the term, in its purest sense, related to highly qualified, multi-skilled health care professionals who

practice in the field of sports medicine (The National Athletic Trainers Association, 2017). Therefore, this keyword was not synonymous with coaching and was subsequently removed. Later in the systematic review process, further discussions were had regarding the inclusion of articles on burnout (e.g., Hjälml *et al.*, 2007). To begin with, burnout was also included as a search term and any articles retrieved using this term that were relevant to the aims of the review were included. The rationale for this decision was that, despite initial concerns that burnout was an outcome of stress rather than a concept that was theoretically incorporated within the term ‘stress,’ burnout was related to the well-being of sports coaches and had been included within the coach stress literature (e.g., Frey, 2007; see, for a review, Fletcher & Scott, 2010) and other systematic reviews examining stress (Edwards & Burnard, 2003; Lamontagne, Keegal, Louie, Ostry, & Landsbergis, 2007). However, after writing the first draft of this chapter, it was decided that the three articles focusing solely on burnout would be removed (Altfeld & Kellmann, 2015; Gencay & Gencay, 2011; Raedeke, 2004).

1.5. Study Summary

The results of this chapter highlight that coaches encounter a variety of organizational, performance, contextual, interpersonal, and intrapersonal stressors, and that they attempt to cope by predominantly using problem-focused strategies. Coaches who have the ability to cope with stressors and increase their PWB, are more likely to exhibit autonomy supportive behaviors towards the athletes. These findings align with the original purpose of the thesis to explore occupational stress, health, and well-being among sports coaches. However, the results highlighted the importance of social support with coaches to potentially cope with stressors, enhance PWB, and increase performance. Therefore, the thesis advanced to explore the social

networks, social support resources, and social support functions of this unique population. This research can offer implications on coaches' development and PWB.

1.6. Introduction to Social Support

The results of the systematic review highlighted the potential importance of social support among coaches, particularly in coping with stressors, enhancing PWB, and increasing performance. Research exploring stressors and burnout with sports coaches have suggested that social support could be an important means of coping to reduce the negative effects of stressors, and enhance PWB and coach development (e.g., Knights & Ruddock-Hudson, 2016; Levy, Nicholls Marchant, & Polman, 2009; Olusoga *et al.*, 2010). However, little research attention has been dedicated to the study of social support in the sports context, particularly among sport coaches.

Sport psychology researchers have highlighted the challenge of conceptualizing social support (Freeman, Coffee, & Rees, 2011; Rees & Hardy, 2000). Indeed, Veiel and Baumann (1992) stated that “if asked, almost every researcher in the field will present a more or less precise definition of support, but, more than likely, it will be different from that of his or her colleagues” (p. 3). This quote points to the complexity and multifaceted nature of social support (Bianco & Eklund, 2001), which is reflected in the varied definitions that can be found in the published, peer-reviewed literature (e.g., Albrecht & Adelman, 1987; Cobb, 1976; Gottlieb, 2000; Holt & Hoar, 2006; Sheridan, Coffee, & Lavellee, 2014). Social support has often been highlighted in the social support literature as a way of coping with stressors and has been defined to encompass the structure of an individual's social network (e.g., group memberships, existence of family ties, and frequency of contact), the explicit resources that one's interpersonal relationships may provide,

and the functional aspects of the interpersonal relationships (e.g., perceived and received support; Cohen & Wills, 1985; see also Cohen, Gottlieb, & Underwood, 2000; Heaney & Israel, 2008; Rees & Hardy, 2004; Thoits, 1995; Uchino, 2009).

Social support structure refers to the number of relationships or social roles a person has within their network, the frequency of contact with their network members, and the density (i.e., strength) of those relationships (Thoits, 1995).

Throughout this thesis, and in line with other scholars (e.g., Anderson & Warner, 2017; Borgatti, Everett, & Johnson, 2018), social support structure will be referred to as social network. Having a homogenous social network allows the network members to have more influence on the individual by exchanging more appropriate social support resources (Heaney & Israel, 2008). Researching social networks can develop an understanding on the support that coaches use and require to receive social support resources that promotes coach development.

Social support resources refers to the nature of support that members of the social network offer and can be provided through four different types of support; appraisal (or esteem), emotional, informational, and or instrumental (or tangible) support (Heaney & Israel, 2008; Rees & Hardy, 2004; Thoits, 2010). To expand, appraisal support pertains to how members of the social network increase a person's sense of competence or self-esteem (e.g., providing positive feedback on his or her coaching; Rees & Hardy, 2004). Emotional support is communication that meets an individual's emotional or affective needs and leads to the person feeling loved and cared for (Heaney & Israel, 2008). For instance, being told "You are a valued member of the coaching team". Thirdly, informational support relates to how social network members provide an individual with advice or guidance concerning possible

solutions to a problem (Cutrona & Suhr, 1992). For example, advice on how to deal with an athlete who is misbehaving. Finally, instrumental support relates to tangible assistance in which the person is provided with physical assistance by social network members (e.g., romantic partner cooking a meal for after coaching; Heaney & Israel, 2008). Research is required to understand the scenarios that coaches require social support resources to augment coach development and PWB. For example, when preparing for an event or during a perceived poor training session.

Functions of social support can be divided into perceived and received support (Uchino, 2009). Perceived support refers to an individual's perceptions concerning the availability and access of their social network and the satisfaction with the social support resources provided by the social network (Haber, Cohen, Lucas, & Bates, 2007; Sarason, Sarason, & Pierce, 1990). Received support refers to the specific supportive behaviors or exchanges of social support resources that are provided to the recipient by their social network (Haber *et al.*, 2007; Uchino, 2009). Functions of social support have the possibility to have positive effects on one's health and PWB by appraising stressors as less of a threat (Gottlieb & Bergen, 2010; Rees, Hardy, & Freeman, 2007). This could help coaches reduce the negative effects of stressors and increase performance of themselves and the athletes that they coach. This thesis will provide in-depth knowledge on the social support structures, resources, and functions to provide recommendations on future research directions and applied implications for future practice.

Over the past decade there has been increased interest in the phenomena of social support in the sport literature (Bianco & Eklund, 2001; Rees, 2016) with research on athletes demonstrating positive links between social support and career

transition (Brown, Webb, Robinson, & Cotgreave, 2018), performance (Tamminen, Sabiston, & Crocker, 2018), and injuries (Mitchell, Evans, Rees, & Hardy, 2014). Overall, athletes have been advised to not feel that they must ‘go it alone’ (Rees & Hardy, 2000). Instead, they should be pro-active with their use of social support and understand that it is not a sign of weakness to ask for help. This level of attention on social support has not been replicated with sports coaches, despite coaching being reported as a particularly stressful, complex, and demanding occupation (Thelwell, Weston, Greenlees, & Hutchings, 2008a). This thesis will aim to advance the current social support literature by exploring social support with sports coaches and the potential effects this can have on their performance and well-being.

A meta-analysis (Holt-Lunstad & Smith, 2012) highlighted that having a social network structure of meaningful relationships that provide effective social support resources was a negative predictor of mortality more strongly than many lifestyle behaviors (e.g., smoking, physical activity) and reduced the negative effects of stressors. Cohen and colleagues (Gottlieb & Underwood, 2000; Wills, 1985) offered two principle social support and stress models: the main (or direct)-effects and stress-buffering models. The main-effect model suggests that social support has a direct beneficial effect on current outcomes irrespective of the level of stressor (Cohen & Wills, 1985). On the other hand, the stress-buffering model suggests that social support buffers the potential harmful effects of stressors on individuals (Cohen *et al.*, 2000). These have been frequently used in the psychology literature to explore the relationship between social support and stressors in different contexts (e.g., Hornstein & Eisenberger, 2017; Lakey, Vander Molen, Fles, & Andrew, 2015; Rees, Mitchell, Evans, & Hardy, 2010). In a particularly stressful occupation such as coaching, it is important to try and understand how social support may be used to

cope with and reduce the negative effects of stressors (chapter four). Evidence evaluating these models have been mixed (Werner-Seidler, Afzali, Chapman, Sunderland, & Slade, 2017) with some empirical studies (e.g., Lakey *et al.*, 2015) and reviews (e.g., Rueger *et al.*, 2016) finding support for the main-effects model, while other empirical studies (e.g., Hornstein & Eisenberger, 2017; Lin, Woelfel, & Light, 1985) and reviews (e.g., Cohen, 2004) have found support for the stress-buffering model. A possible reason for the observed mixed evidence may be the different methodologies used (e.g., reliability of measures, sample used, sample size; Rueger *et al.*, 2016). Health literature has found social support to have a positive influence on a person's health and PWB (Applebaum *et al.*, 2014; Cohen, 2004; Thoits, 2011; Rosengren, Wilhelmsen, & Orth-Gomer, 2004). To expand, Rueger and colleagues (Malecki, Pyun, Aycok, & Coyle, 2016) suggested that social support from family, teachers, peers, and close friends demonstrated a small to moderate positive effect size on depression. It seems that broader social networks of supportive relationships provide individuals with more positive life experiences which reduces the onset of depression (Rueger *et al.*, 2016).

The investigation of social support in a coaching context presents a unique opportunity to expand scientific understanding in an area that has not yet been overtly explored, while also developing important evidence for interventions that can enhance coach development, performance, and PWB. Sports coaching organizations such as Connected Coaches (Connected Coaches, 2018), International Coaching Community (ICC; International Coaching Community, 2018), and UK Coaching (UK Coaching, 2018), offer platforms for coaches to develop and connect with other coaches through discussion boards, seminars, and workshops. However, a recent UK Coaching (2011) survey reported that approximately 75% of 585 coaches from the

United Kingdom (U.K.) felt that they had inadequate support. This demonstrates that coaches either need to be made aware of the support that is available to them or that the current social support resources are not fit for purpose and so more resources need to be developed to assist coaches. This program of research will aim to explore social support resources with sports coaches to understand the types of support that they use (chapters three and four) and whether they perceive it to be fit for purpose (chapter five). Sport England (2017) and UK Coaching (2017) have both recently produced four-year strategies (2017-2021) to try and raise the profile and performance of coaching. These plans focus on supporting the coaching community by developing a hub for coaches to communicate, share knowledge (e.g., advice on maintaining positive PWB), and provide learning and coaching opportunities for development. Thus, it is clear that sport organizations acknowledge the need for additional support to be provided to coaches and, in doing so, makes available opportunities for researchers to fully understand, influence and inform the way that coaches are supported. This alongside calls from scholars for more diverse research approaches (e.g., diaries, images, SNA) to investigate the multiple components of social support in sport (Hassell, Sabiston, & Bloom, 2010), provides the scientific and applied rationale for the current program of research.

1.7. Contributions of Thesis

The thesis will aim to answer five main priorities outlined in the review, focusing on social support and the conceptualization provided. First of all, the program of research will explore coaches' social networks to examine the structure of coaches' social networks using a novel technique called Social Network Analysis (SNA) to provide a network diagram of the coaches social support. This is important to understand who and what support coaches use for different situations and why so

that we can inform NGBs and organizations on providing better rounded support to coaches (chapter three). Secondly, social support resources (appraisal, emotional, informational, and instrumental) will be investigated using a longitudinal approach to understand the types of social support that coaches require to help cope with stressors (chapter four). This provides information on the types of social support accessible to coaches and how they help coaches to develop and maintain PWB. Thirdly, social support functions (received and perceived) will be explored using a multiple case study design to understand whether receiving support or only the perception of support being available can assist female soccer coaches and enhance their PWB (chapter five). Fourth, previous literature on coaches' experiences of stressors and coping have mainly concentrated on the performance context of HPCs. Throughout this program of research, the experiences of coaches across a variety of performance contexts will be discussed. Continuing with the sample, the current review highlights the current underrepresentation of female coaches' in research. During the course of this thesis, female coaches' experiences will be explored. As highlighted in the systematic review, there is an imbalance between male (74.2%) and female (22.5%) coaches experiences. Understanding the experiences of females is important to help increase and maintain their intentions to participate in the coaching profession. Finally, from a methodological perspective, the systematic review has found that qualitative studies investigating sports coaches experiences have used predominantly semi-structured interviews to collect data. To answer different research questions, diverse data collection techniques are required (Polkinghorne, 2005). Therefore, the thesis will aim to expand on this by providing coaches' experiences using novel data collection techniques and research strategies appropriate to answering the research aims. For example, interviewee-aided photo-

elicitation and a longitudinal design is used in chapter four to provide visual data representing coaches' perceptions of social support alongside information aligning with the multifaceted nature of social support. With these aims in mind, given the deficiency of the social support research with coaches, and the lack of research regarding non-elite, female coaches, this thesis strives to address these issues.

The thesis employed a bottom-up approach to research (Kozlowski & Klein, 2000). This approach used themes and categories constructed from the data to generate new ideas and inform subsequent studies (Patton, 2002). For example, in this thesis, the published systematic review acted as a scoping study to observe patterns in the research areas of stressors, coping, and well-being among sports coaches. The thesis will aim to expand on the current social support and sports coaching literature by offering coaches experiences using appropriate data collection techniques and strategies to answering the research aims. For example, interviewee-aided photo-elicitation and a longitudinal design is used in chapter four to provide visual data representing coaches' perceptions of social support alongside information aligning with the multifaceted nature of social support. With these aims in mind, and given the lack of research regarding non-elite and female coaches, this thesis strives to address these issues of research.

The results of the systematic review provided a clear rationale for further exploration of social support with coaches and informed chapters three, four, and five. Based on the purpose of the thesis to qualitatively explore male and female sport coaches' social networks, social support resources, and social support functions. and using the bottom-up approach, this program of research aims:

- 1) To explore the social networks of male and female sports coaches (see chapters three and five)
- 2) To examine social support resources of sports coaches (see chapters three, four, and five)
- 3) To gain an understanding of coaches perceived effects of social support on stressors (see chapter four)
- 4) To investigate perceived and received social support functions among sport coaches (see chapter five)

1.8. Structure of Thesis

This thesis consists of six chapters and includes four independent but related studies (see also Figure one). Following the current chapter, chapter two introduces the methodological underpinning for the thesis and outlines my philosophical assumptions that informed the program of research. In addition, it also provides insight into the research ethics and research quality assessments that were used throughout this thesis. Chapters three, four, and five, form the three empirical studies that were conducted during this program of research. The purpose of chapter three was to explore male and female sports coaches' perceptions of social support, social network structures, social support resources, and the situations where coaches use social support. There was a particular focus on the structure conceptualization of social support by exploring coaches' social networks using interviews and SNA. Chapter four develops on from the previous chapter by providing insight into male and female sports coaches social support resources provided by the social network,

using a longitudinal design. In addition, coaches' perceptions of social support through interviewee-aided photo-elicitation and the perceived effects of social support on stressors were studied. Special emphasis was placed on social support resources by exploring this over a six-week period. Subsequently, chapter five uses an exploratory multiple case study approach aimed at exploring the perceived and received social support functions among UEFA B female soccer coaches. This brings together the social network structure and social support resources provided in chapters three and four by exploring whether the coaches are satisfied with the perceived social support network and the social support resources that they receive to help them develop and enhance their PWB.

The final chapter of the thesis, chapter six, aims to integrate the findings from the systematic review and the three empirical studies. First, a summary of the key findings from each study are presented before discussing the collective findings from this program of research. This includes an overview of the specific applied and theoretical implications for a range of stakeholders. In addition, chapter six details some of the strengths and limitations of this thesis, identifies future research directions, and offers an overall conclusion of the research program. The next chapter will outline the philosophical assumptions that underpins this program of research. In addition, chapter two will address the methods and methodologies used in this thesis to fill some of the gaps in the literature that have been highlighted.

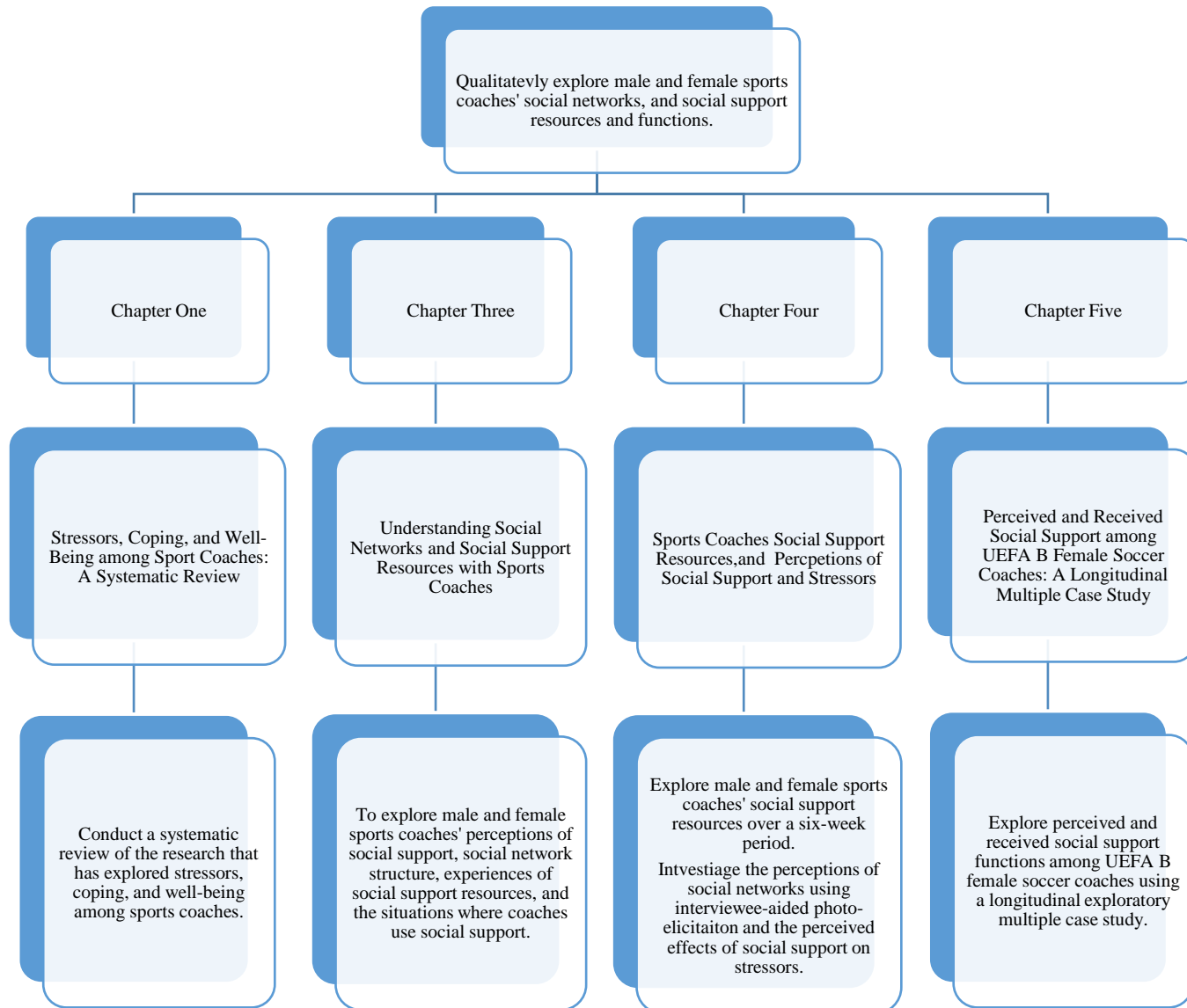


Figure 2. Titles and Aims of the Research Chapters.

Methods and Methodology

This chapter provides information relating to the author including previous experiences and discussions of the relevant research paradigms and the philosophical assumptions that underpin this thesis. Subsequently, the previous experiences of the researcher alongside the methodologies and methods used in the thesis, informed by the philosophical assumptions, will be provided. Social support is a complex phenomenon (Rees & Hardy, 2004) and to gain a thorough understanding of it, different approaches to research are necessary (Polkinghorne, 2005). As demonstrated in the systematic review, much of the qualitative literature surrounding social support and sports coaches utilizes semi-structured interviews only. Thus, multiple data collection techniques are used throughout the thesis to explore the different facets of social support provided in chapter one (social networks, social support resources, and social support functions). First of all, Social Network Theory (SNT) will be discussed. This was used to investigate social network structures in chapter three. Secondly, the use of visual methods as a data collection technique, in particular interviewee-aided photo-elicitation, is discussed. Interviewee-aided photo-elicitation was used in chapter four to explore coaches social support resources and perceptions of social support. Thirdly, information on multiple case studies is provided. This research strategy was employed during chapter five to holistically explore female coaches social support functions. Additional information relating to these techniques can be found in the relevant chapters. Moving on to data analysis, thematic and SNA procedures will be offered before ethics and research quality criteria that were used throughout this program of research are provided.

2.1. Researcher Positionality

This section provides an overview of the researcher's previous experiences and outlines the philosophical assumptions that underpin this thesis. Framing the researcher's prior experiences and beliefs provides an understanding of how this may have influenced the program of research.

2.1.1. Previous Experiences

After two years of coaching boys' soccer at my local grassroots club in Norwich, I moved to coaching 11 and 12-year-old girls at a Player Development Centre (PDC) in Ipswich. This started my passion of working in women's soccer. When I moved to Leeds in 2015, I started coaching at West Riding PDC with 13 and 14-year-old girls before moving to the elite environment of a Regional Talent Club (RTC) at York City Foundation. After two seasons of working with the under 10s and 14s with the aim of player development, players gaining a professional contract, and having gone through the FA Level Three (UEFA B) coaching course, I moved to Bradford City Women's as head coach of the under 18s team whilst assisting with the senior set-up. The accumulated nine years of coaching experience has helped to shape my coaching style and holistic philosophy. The previous coaching experiences and assumptions may have subconsciously affected the line of questioning on certain topics due to myself already having views on certain topics (e.g., coaching pathway).

During my coaching journey, I developed an interest on the effects of sport psychology on performance. Therefore, reflecting on my undergraduate in Applied Sports, Health, and Exercise at the University of East Anglia, I decided to develop my knowledge on sport psychology by completing a Masters of Science in Sport and Exercise Psychology at Loughborough University. My passion for coaching and sport psychology attracted me to this PhD and line of research, with an aim to make

an impact in coaches well-being and development. Through my applied and academic experiences, I grew an appreciation of the importance of social support to progress and develop as an individual. Three years on, I have deepened my theoretical understanding of social support and how this can influence a sporting individual. This has informed the program of research that is outlined in this thesis.

2.1.2. Paradigms: Do they matter?

Paradigms underpin and inform a study's research question, purpose, methods, and design (Sparkes & Smith, 2014). They tell us something about the researcher and their proposed relationship to the other (e.g., the interviewee; Lincoln, 2010). According to Guba and Lincoln (1994, p. 107) a paradigm is "a set of basic beliefs (or metaphysics)... and a worldview that defines, for its holder, the nature of the 'world', the individual's place in it, and the range of possible relationships to that world and its parts." Namely, a paradigm is the way in which a person views the world and their place within it. It relates to how an individual goes about completing tasks with little need for reflection (Sparkes & Smith, 2014). The scarcity of reflection is both a strength and a weakness because whilst paradigms make actions possible (e.g., conducting research), the reasons for those actions are often hidden and unquestioned by the researcher. The lack of questioning and reflection by some scholars has often led to the role of the paradigm not being addressed effectively in research articles (Mackenzie & Knipe, 2006). For instance, researchers often provide varied and conflicting definitions of paradigms. This can cause confusion among novice researchers and lead to a lack of rigorous research (Mackenzie & Knipe, 2006). To ensure clarity and rigor in this program of the research, the following paragraph will define the key terms associated with paradigms that have been adopted in this thesis.

Ontology can be classified as the “the nature of reality” (Creswell, 2013, p. 21) with epistemology characterized as “the philosophy of knowledge or how we come to know” (Krauss, 2005, p. 758). Different ontological and epistemological views provide differing assumptions of reality and knowledge which underpin the research approach (Yilmaz, 2013). This is reflected in the methodology and methods. Methodology is represented as “the process of how we seek out new knowledge. The principles of the inquiry and how the inquiry should proceed” (Denzin & Lincoln, 2011, p. 104). In other words, the procedures used to acquire knowledge and the truth. A method is classified as a “tool or technique for gathering data” (Krane & Baird, 2005, p. 89).

Accordingly, a researcher’s paradigm includes ontological (What kind of being is the human being? What is reality?), epistemological (What is the relationship between the enquirer and the known?), and methodological (How do we know the world or gain knowledge of it?) viewpoints (Guba & Lincoln, 1994). For example, quantitative researchers adopt a dualist and objective epistemological position. This assumes that the researcher and the researched are independent of each other (Yilmaz, 2013). To elaborate, the researcher is capable of studying the ‘object’ without influencing it or being influenced by it. In comparison, qualitative researchers, of which I am one, assume a more subjectivist and constructionist perspective (Ponterotto, 2005). Qualitative researchers advocate that there can be no separation of the researcher and the researched, and that a person’s values will mediate and shape what is understood (Sparkes & Smith, 2014). In 1994, Guba and Lincoln presented four different paradigms: positivism, post-positivism, critical theory, and constructivism (see Table 7). As shown in Table 7, a person’s paradigmatic belief informs the methodologies that they choose.

Table 7

Basic Beliefs (Metaphysics) of Alternate Inquiry Paradigms

Item	Positivism	Post-positivism	Critical Theory	Constructivism
Ontology	Naïve realism – “real” reality but apprehendable.	Critical realism – “real” reality but only imperfectly and probabilistically apprehendable.	Historical realism – virtual reality shaped by social, political, cultural, economic, ethnic, and gender values.	Relativism – local and specific constructed realities.
Epistemology	Dualist / objectivist; findings are true.	Modified dualist/objectivist; critical tradition/community findings probably true.	Transactional / subjectivist; value mediated findings.	Transactional / subjectivist; created findings – between the researcher and researched.
Methodology	Experimental / manipulative; verification of hypothesis; primarily quantitative methods.	Modified experimental / manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods.	Dialogue / dialectical; discussions between two or more people; predominantly qualitative methods.	Hermeneutical / dialectical; interpretations and discussions between two or more people; principally qualitative methods.

Note. Taken from Guba and Lincoln (1994, p109).

Concerning my philosophical standpoint, by answering the aforementioned philosophical questions (see Table 8), I realized that my ontological stance is best described as relativist and, therefore, I recognize that multiple, subjective realities exist and that my values and experiences influence my understanding of the coaches’ experiences (Sparkes & Smith, 2014). My epistemological stance is underpinned by constructionism, which suggests that there can be no theory free knowledge because the researcher and the researched are interdependent in such a way that findings are

co-created (Yilmaz, 2013). These form my paradigmatic assumption of social constructionism (Denzin & Lincoln, 2011).

Table 8

My Philosophical Standpoint

Viewpoint	My Standpoint	Belief
Ontological (What kind of being is the human being? What is reality?)	Multiple, subjective realities	Relativist
Epistemological (What is the relationship between the enquirer and the known?)	Researcher and the researched are co-dependent	Constructionism
Methodological (How do we know the world or gain knowledge of it?)	Experiences and perceptions through narratives over the course of life	Interpretations / Qualitative

In 1997, McLeod stated that the goal of research underpinned by social constructionism is not to produce fixed, universal knowledge, but to deliver an appreciation of what is possible. This gives rise to a criticism that research using social constructionism lacks ability to promote change (Bury, 1986). However, it has been argued that this criticism arises due to misunderstanding the process of social constructionism research (Burningham & Cooper, 1999). Social constructionism researchers do not base their arguments or discredit opposing arguments by comparing them unfavorably with objective reality but instead on the plausibility of their findings (Burningham & Cooper, 1999). This is consistent with the idea of constructionism in that the findings of research are one of many discourses and that social constructionism can generate real debate that leads to change (Andrews, 2012).

Social constructionism suggests that knowledge and understanding of the world is socially negotiated through the social interactions that occur on a daily basis (Andrews, 2012). It is important to note that social constructionism does not deny the influence of genetics but elects to concentrate on investigating the social influences on individual life (Galbin, 2014). It puts forward that what an individual regards as the truth is not a product of objective observation of the world but the continued engagement of social interactions that occur with people (Burr, 2015). In other words, realities and knowledge are sustained through social processes (Galbin, 2014). Therefore, there is an emphasis on the reflexive nature of individuals who adopt a social constructionist stance (Galbin, 2014). As highlighted previously, there can often be a lack of reflection from researchers on why certain decisions were made during the research process (e.g., the methods chosen; Mackenzie & Knipe, 2006). Reflecting on the research process encourages the researcher to think more about the decisions made and subsequently, provide stronger rationales (e.g., why use semi-structured interviews?; Berger, 2015). I hope to have achieved this throughout the thesis by utilizing reflective subheadings during the research chapters (two, four, five, and six) to highlight my research journey and the processes undertaken to complete this thesis.

As a researcher, I also draw on elements from critical theory (Creswell & Miller, 2000). This paradigm has similarities with social constructionism in that it posits that reality is shaped by social values of the person, there should be a close collaboration between the researcher and the researched, and it endorses reflexivity. However, critical theory promotes deep reflections on what shapes interpretations of the world to challenge individuals' belief systems and social practices (Sparkes & Smith, 2014). Thus, this approach is not interested in only creating knowledge but

working towards change and transformation (Ponterotto, 2005). This viewpoint of critical theory can help to offset a potential weakness put towards social constructionism in that it can lack ability to promote change (Bury, 1986). With my philosophical standpoint now identified, it is appropriate to provide an overview and description of the methodological techniques employed throughout the thesis.

2.2. Data Collection

The systematic review of the literature that is presented in the introduction demonstrates that there have been near equivalent amounts of qualitative and quantitative research methods used to investigate coaches' stressors, coping (including social support), and PWB. Therefore, whilst the latest literature has encouraged further qualitative research (e.g., Didymus, 2016; Tamminen & Gaudreau, 2014; Thelwell *et al.*, 2010), the rationale for employing qualitative research methods must extend beyond the recommendations of the published literature. More specifically, the methods employed stemmed from my paradigm to try and gain a more holistic understanding of coaches' experiences and the meanings behind those experiences.

Qualitative research allows for a holistic approach by focusing on the way people interpret and make sense of their experiences through understanding the social reality of individuals, groups, and cultures, and by exploring the behaviors, perspectives, and experiences of people in their daily lives (Sparkes & Smith, 2014). Sports performers' experiences have frequently been explored using semi-structured interviews (e.g., Olusoga *et al.*, 2009; Thelwell *et al.*, 2017) and were used throughout this thesis (chapters three, four, and five) to gain an understanding of sports coaches' experiences and perceptions of social support. In addition, the use of semi-structured interviews during this program of research ensured that the

interviewees involved in each chapter (three, four, and five) were asked the same set of pre-established questions whilst affording flexibility to probe and, in doing so, assist with collecting data that addressed the research aim (DiCicco-Bloom & Crabtree, 2006). The semi-structured approach aligns with the social constructionism perspective because it allowed the interviews to focus as much as possible on the coach's experiences that they deemed most relevant (Creswell, 2013).

During the last 50 years, there has been considerable growth in the variety of qualitative methods to compliment interviews (e.g., life histories, narrative enquiry, and film ethnography; Polkinghorne, 2005). Yet, the majority of the previous qualitative research with coaches has continued to use semi-structured interviews only (e.g., Didymus, 2016; Frey, 2007; Knight & Harwood, 2009; Knights & Ruddock-Hudson, 2016; Lundkvist *et al.*, 2012; Olusoga *et al.*, 2009, 2010, 2012; Rhind *et al.*, 2013; Robbins *et al.*, 2015; Thelwell *et al.*, 2008a, 2010; see also chapter one), with other qualitative data techniques such as focus groups (Bruening & Dixon, 2007; Dixon & Bruening, 2007) and dairies (Levy *et al.*, 2009) being used to a lesser extent. Therefore, there is a need for more novel data collection techniques, such as visual (e.g., images) and documentary (e.g., diary and narrative studies), to answer different kinds of research questions that cannot be asked through the use of interviews only (Polkinghorne, 2005). Throughout this program of research, novel data collection techniques and research strategies were used (social network analysis, interviewee-aided photo-elicitation, and multiple case study) alongside semi-structured interviews to explore the social networks, resources, and functions of sport coaches. The desire for using original methods alongside semi-structured interviews fits with my philosophical assumptions by endeavoring to generate information of sufficient breadth and depth that acknowledges the

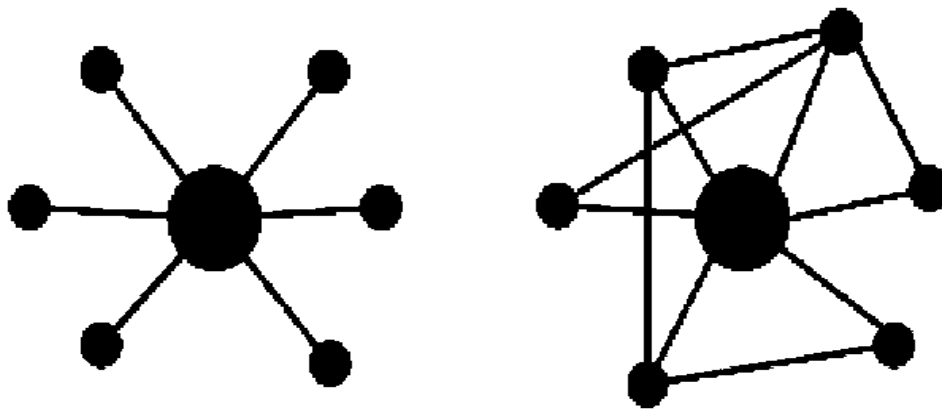
complexity of individuals, their experiences, and the phenomena (Polkinghorne, 2005). The following sections provide an overview of the data collection techniques that were used alongside semi-structured interviews during this program of research and the justifications for their inclusion.

2.2.1. Social Network Theory

SNT is an interdisciplinary approach that emerged in the 1930s from sociology and psychology (Wasserman & Faust, 1994). This approach focuses on the “relationships among social entities and on the patterns and implications of these relationships” (Wasserman & Faust, 1994, p. 3). This description emphasizes a particular advantage of SNT that it can examine both the overall social structure (e.g., network members in the social network) and the individual attributes (e.g., the relationship between network members in the social structure) simultaneously through SNA (Lusher, Robins, & Kremer, 2010; Otte & Rousseau, 2002). SNA was used in chapter three of this thesis to investigate the social network structures of sports coaches and the relationships between the coach and their network members.

A challenge specific to SNA is defining which network members to include in a network analysis. If a researcher does not set restrictions on the network members to be explored, social networks can be continuous and include individuals irrelevant to the aims of the research (Wäsche, Dickson, Woll, & Brandes, 2017). To counter this, researchers using SNA can decide to gather data on either the whole network, in which all the relations between individuals in a network are explored (Heath, Fuller, & Johnston, 2009), or upon personal or ego-networks, where all the relationships of a specific individual are recorded (Lusher *et al.*, 2010). For the purpose of this thesis, ego-networks (see Figure 3 for examples) were chosen to explore the social networks of sports coaches and provide in-depth visual

information on their social network members that are characterized by the social environment. In addition, boundaries can be set by the researcher on the network members that can be included (Kossinets, 2008). Chapter three used an event-based approach to boundaries (Marin & Wellman, 2009) that looked at the network members who contributed during key events. For example, the focus in chapter three included network members who had contributed in supporting the coach through at least one coaching stressor.



*Figure 3. Two Illustrative Examples of Ego-Networks. Adapted from “Network Analysis in the Social Sciences,” by S. P. Borgatti, A. Mehra, D. J. Brass, and G. Labianca, 2009, *Science*, 323, p. 894.*

After the network members had been defined, an appropriate data collection approach needed to be selected. The most common SNA data collection approaches used to explore social networks are by means of questionnaires and surveys (Crossley, 2010). A challenge of using these approaches are that researchers often have to deal with incomplete data sets due to non-responses (Borgatti *et al.*, 2018). There are ways of reducing non-responses (e.g., building rapport with respondents before administering data collection), however, incomplete data remains a major

challenge of quantitative SNA (Borgatti *et al.*, 2018). Despite this, questionnaires are still frequently used (e.g., Cousens, Barnes, & MacLean, 2012). Furthermore, it has recently been argued that quantitative SNA alone often does not provide enough data for a full understanding of social support beyond its structure, therefore, there have been calls for an increase in qualitative methods (e.g., observations and interviews) to compliment quantitative SNA and provide additional information on network dynamics (Crossley, 2010; Heath *et al.*, 2009). A qualitative method based on sociometry that provides a means for illustrating the interpersonal structure of groups and was used in chapter three, is sociograms (see Appendix H; Quatman & Chelladurai, 2008).

Sociograms examine how people perceive their social network and the content and meaning of the ties in that network through visual representations (Ryan, Mulholland, & Agoston, 2014). This data collection instrument was utilized in chapter three to provide visual diagrams of coaches' social networks whilst also providing additional information on the social network dynamics such as why coaches have that individual as a network member. Interviewee-aided sociograms are a technique where the interviewees draw their own social network on a piece of paper. Hogan, Carrasco, and Wellman (2007) reported that a picture of the network on paper provides richer data because it is something that the interviewees create in active collaboration with the researcher and so feel more involved in the research process. This is advantageous to the use of interviews only because it adds visual data and knowledge on the structure of social networks alongside the relationships and their influences on the individual. This data collection technique was deemed appropriate for use in chapter three, which examines, among other things, social networks of sports coaches, the process of deciding who to include in their network,

and the stories and events they sought to share. Additional information on the use of sociograms is provided in chapter three.

SNA has not been used widely in mainstream psychology, but has been used to study a variety of health problems such as obesity (Schaefer & Simpkins, 2014) and smoking cessation (Aschbrenner *et al.*, 2017). In sport, there has been limited use of SNA, with research investigating athlete's individual and group behavior within team sports (Lusher *et al.*, 2010). For example, Warner, Bowers, and Dixon (2012) used SNA as a tool to investigate the cohesion and performance of two American Division-I women's basketball teams. The results revealed that the higher performing team showed improved structural cohesion and the ability for key players to move between different networks within the team. The limited use of SNA in psychology and sporting contexts, and its ability to produce visual data on social networks and the dynamics of relationships, makes it appropriate to use in chapter three to provide in-depth information on the social network structure of coaches. Research of this nature can help to understand the support that coaches use and require and inform NGBs and practitioners about how best to support coaches.

2.2.2. Photo-Elicitation

Visual methods represent a data collection technique that uses images or videos to elicit further discussions from interviewees (Glaw, Inder, Kable, & Hazelton, 2017). The use of images or photo-elicitation can represent experiences, social domains, and physical settings of an individual, assisting them in the ability to reflect and explain their experiences (Van Auken, Frisvoll, & Stewart, 2010). In this thesis, photographs were used during the course of the interviews in chapter four to invoke memory and elicit accounts from coaches on their experiences of social support resources and perceptions of social networks. There are two primary

variations of photo-elicitation; the first is externally-driven where interviewees are asked to evaluate images that have been preselected by the researcher (Phoenix, 2010). The second alternative is interviewee-driven where the interviewees choose or take images based on the topic area to form the basis of the interview (Van Auken *et al.*, 2010). In this program of research, interviewee-driven photo-elicitation (Phoenix, 2010) was used for numerous reasons; (a) coaches became co-producers of data, which is useful for understanding how they viewed their world and experiences, (b) interviewee-produced images can be used as stimuli in the conduct of interviews, for example, previous experiences of social support with network members, and (c) this technique has been recognized as an especially useful form of data collection for understanding the experiences of marginalized groups, such as with sports coaches (Richard & Lahman, 2015; Phoenix, 2010).

The last decade has witnessed a significant growth in the use of visual data and photographs within qualitative research (Phoenix, 2010). However, despite the increased popularity within disciplines such as anthropology (e.g., Samuels, 2004) and sociology (e.g., Clark-Ibáñez, 2004), it remains an underutilized method within psychological research (Bates, McCann, Kaye, & Taylor, 2017). In the context of sport, Strachan and Davies (2015) used photo-elicitation to investigate the development experiences of youth athletes. The authors highlighted the importance of supportive social relationships for positive youth development. The use of photos emphasized the influence that adults (e.g., sports administrators), coaches, family, school, and the local community had on athletes' development. The multidimensional qualities of images to provide information on the multi-layered nature of social support and its ability to encourage coaches to reflect upon and explain their experiences and perspectives in additional detail (Van Auken *et al.*,

2010) makes it appropriate for use in chapter four to explore the experiences of social support resources and perceptions of social networks with sport coaches. The use of this technique in this thesis provides original visual and verbal information on the relationships that influence coach development and PWB. Further information on the use of interview-aided photo-elicitation can be found in chapter four.

2.2.3. Multiple Case Study

A case study is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.” (Yin, 1984, p. 23). Given this definition, it is important to note that a case study is not a method but a research strategy (Yin, 2013). Chapter five of this thesis uses a case study strategy to investigate the phenomenon of social support within the real-life context of female soccer coaches. There are two main types of case study that can be used; single and multiple (Stake, 2005). In their simplest forms, a single case study is a study that contains a single case, whereas a multiple case study uses multiple cases to look at the same phenomenon (e.g., social support; Baxter & Jack, 2008). Multiple case studies have been frequently cited as a more robust and reliable research strategy than single case studies (Baxter & Jack, 2008). Therefore, a multiple case study approach was used in chapter five to investigate social support functions with female soccer coaches.

Chapter five provides evidence of real-life events of social support functions with female soccer coaches using semi-structured interviews and an exploratory multiple case study. This design aligns with social constructionism in that it can provide close collaborations between the researcher and the interviewees, while enabling interviewees to tell their narratives (Yin, 2013). The number of

interviewees used to collect data leads to a common criticism of case studies, the small sample size (Flyvbjerg, 2006). It is often mentioned that the sample sizes during case studies are too small and therefore it is difficult to generalize the findings (Flyvbjerg, 2006). However, a well-conducted case study takes significant time to complete and can provide rich, in-depth, credible information relating to the research area (Baxter & Jack, 2008).

Case studies have been a common research strategy in psychology and sociology. For example, Woodman and Hardy (2001) used a case study approach to investigate organizational stressors among elite athletes from the U.K. It was found that environmental (e.g., training atmosphere), personal (e.g., frustration at having an injury), leadership (e.g., coaching styles), and team (e.g., lack of support) issues were organizational stressors for athletes. With regards to sports coaches, case studies with elite coaches have reported that they predominately experience performance (e.g., poor training) and organizational (e.g., administration) stressors (Levy *et al.*, 2009; Thelwell *et al.*, 2010). This research has also found that problem- (e.g., planning) and emotion-focused (e.g., social support) coping was used to deal with stressors. The use of an exploratory multiple case study design in this thesis provides female soccer coaches who hold a UEFA B license in-depth, real life experiences of social support functions. This can have an influence on coaches' PWB and provide NGBs with information on how to increase female coaches' intentions to stay in the profession through the promotion of previous positive experiences.

2.3. Data Analysis

2.3.1. Thematic Analysis

Thematic analysis was used throughout this thesis (chapters four, five and six) as a method for identifying, analyzing, and reporting patterns (themes) from the semi-structured interview transcripts. Themes are conducted from a set of data by focusing on *what* is said (Braun, Clarke, & Weate, 2016). Thematic analysis aligns with my ontological and epistemological assumptions and differs from other forms of qualitative analysis (e.g., hierarchical content analysis) in that it does not look to quantify themes (Sparkes & Smith, 2014). The guidelines set out by Braun and Clarke (2006) were adopted throughout this thesis to provide consistency and ensure that the application of thematic analysis was theoretically and methodologically rigorous. Consistency with themes and the epistemological position of the researcher during analysis ensures that the data is organized into coherent and internally consistent accounts of the accompanying narratives whilst reducing overlay between themes (Braun, Clarke, & Terry, 2014). Table nine provides an outline of the six stages included within the thematic analysis process that were used when analyzing the interview transcripts to ensure consistency. The stages ensure that a rich detailed analysis is offered that also allows for the experiences of the interviewee to be heard (Braun *et al.*, 2016).

During data analysis of chapters three, four, and five, the audio files were transcribed verbatim using Microsoft® Word® and NVivo (QSR International Pty Ltd, 2016) was used to assist in the six recursive phases of analyses (Braun & Clarke, 2013). This process allowed me to immerse in and reflect on the data (Braun *et al.*, 2014). The next stage required identifying codes and themes. To begin with, inductive analysis was used to create original themes that identified strongly to the

interview data (Nowell, Norris, White, & Moules, 2017) on social networks, social support resources, and or functions of social support. This approach aligns with the bottom-up approach utilized during the thesis by analyzing data without trying to fit them into a pre-existing coding frame (Nowell *et al.*, 2017). During the latter stages of analysis, the inductive themes that had been created and showed similarities to existing theories or models were adapted to create appropriate deductive, theory driven themes (Fereday & Muir-Cochrane, 2006). This approach often provides a more detailed analysis of specific aspects of the data but can produce a less rich description of the overall data (Braun & Clarke, 2006). These approaches highlight an advantage of thematic analysis in that it offers theoretical freedom, providing a flexible and useful research tool to deliver rich, detailed, and complex accounts of the data (Braun *et al.*, 2016).

Throughout chapters three, four, and five, a combination of these two approaches were used to form abductive thematic analysis (Fereday & Muir-Cochrane, 2006). This approach aligns with the constructionist stance that guided the thesis by providing opportunities to create rich descriptive themes that strongly link to the data whilst also acknowledging the belief that there can be no theory free data. Once it had been decided that abductive thematic analysis was most appropriate for this thesis, the ‘level’ at which the themes would be identified were decided; latent or semantic (Braun *et al.*, 2014). To this regard, latent level thematic analysis was chosen throughout the program of research because thematic analysis at the latent level goes beyond semantic content by identifying or examining the underlying ideas, assumptions, and conceptualizations of sociocultural contexts and structural conditions that enable individual accounts (Braun & Clarke, 2006).

Table 9

The Six Phases of Thematic Analysis

Phase	Description of the process
1. Familiarize yourself with the data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generate initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Search for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Review themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'diagram' of the analysis.
5. Define and name themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Produce the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Note. Adapted from "Using Thematic Analysis in Psychology," by V. Braun, and V. Clarke, 2006, *Qualitative Research in Psychology*, 3(2), p. 87.

2.3.2. Social Network Analysis

To explore the social network structures of sports coaches in chapter three, interviewee-aided sociograms were analyzed via NodeXL, an extension for Microsoft® Excel®. NodeXL was chosen over other software programs (e.g., UCInet or Pajek) because it has previously been used in other research (e.g., Hambrick, 2017) to analyze and represent network diagrams through the use of visualization functions (e.g., ego-networks) using the familiar Microsoft® Excel® spreadsheet for data handling (Smith *et al.*, 2009). In chapter three of the thesis, NodeXL was used to transfer data from the sociograms (see Appendix H) to a

Microsoft® Excel® spreadsheet to create ego-networks of the sports coaches' social networks. To create the ego-networks, an edge list was created using the names of the coach the network members from the sociogram to indicate the presence of a relationship. These lists were extended with additional columns (e.g., color, shape, size) that contained data relating to the relationship between the coach and the network member (e.g., closeness of the relationship). The data was then converted into an ego-network diagram by clicking on the 'create diagram' function (see, for an example, Figure 3; Hoppe & Reinelt, 2009). This provided a diagram of the network structure to be developed for each coach and therefore, was appropriate for the use in chapter three with the aim to explore sports coaches network structure.

2.4. Ethical Considerations

The ethical considerations discussed in this section are employed throughout chapters three, four, and five. Given the nature of qualitative research and the data collection techniques used throughout this thesis, ethical considerations were important (Brinkmann & Kvale, 2005). Throughout the research process, principles of ethical research were adhered to ensure the safeguarding of the coaches and myself as the researcher (Tracy, 2010). For each study, ethical approval was gained from a local research ethics coordinator at Leeds Beckett University. During each phase of data collection (chapters three, four, and five), once ethical approval had been granted, coaches were contacted via email and invited to participate in the relevant study (see Appendix C). No incentives or rewards were offered to interviewees for their participation in the interviews. Each coach was assured that his or her comments would remain anonymous and confidential (Guillemin & Gillam, 2004), and was informed of the nature of the study; the compliance of the study with the British Psychological Society's Code of Ethics and Conduct; and the collection,

storage, and destruction of data in accordance with the Data Protection Act (1998)². Coaches who expressed an interest in being involved in the study were sent a participation information sheet (see Appendix D) and a copy of the interview guide (see Appendices G, J, and M) so that they could familiarize themselves with the questions. Next, a date and an ethically appropriate location for each interview was organized to meet the coach's needs. All coaches were actively coaching during the completion of each study and although not purposefully sampled in this way, all coaches identified themselves as White British and coaching in the U.K. at the time of data collection. In total, 47 out of the 48 interviews carried out during this thesis were conducted face-to-face. In chapter five, one interview was conducted over the phone due to personal reasons (see chapter five reflections for more details). All interviews were recorded using a digital recording device. Prior to the first round of interviews for chapters three, four, and five, each coach completed a written informed consent form (see Appendices F, I, and L) and a demographic information sheet describing their age, gender, sport coached, coaching level, and coaching experience (see Appendix E). Prior to each interview, the coaches were asked to confirm that they understood the purpose and procedure of the study and voluntarily participated to commence with the interview. Pseudonyms are used throughout this thesis to protect the coach's identities and maintain confidentiality. Ethical issues that are specific to each phase of the research are discussed in the relevant chapters.

² All the data in this thesis was collected and stored before the introduction of the new General Data Protection Regulations (GDPR) in May 2018.

2.5. Research Quality

This section explores the research quality criteria used to increase the trustworthiness of the thesis as a whole. Specifically, the criteria applies to chapters three, four, and five. In 1985, Lincoln and Guba asked “How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?” (p. 290). Since that time, researchers have debated the need for quality assessment criteria in qualitative research and what the criteria should look like (e.g., Guba & Lincoln, 1989; Parker, 2004; Smith & McGannon, 2017). It has been argued that qualitative researchers’ beliefs do not allow for a blanket criterion across all qualitative research (Cassell & Symon, 2011). This has led to scholars suggesting different procedures for establishing validity and rigor in qualitative research that can be selected based on the appropriateness of the procedures for the research being conducted (e.g., Creswell, 2007; Denzin & Lincoln, 2005; Guba & Lincoln, 2005). This aligns with the diversification perspective (Sparkes & Smith, 2014) and the paradigmatic assumptions that underpin this thesis by positing validity as socially constructed and therefore, differing in meaning according to the form of inquiry.

In line with social constructionism and critical theory, the first criterion chosen for this thesis that has become an increasingly recognized strategy for enhancing the quality of qualitative research, was reflexivity (Berger, 2015; Goldblatt & Band-Winterstein, 2016; Watt, 2007). The use of reflexivity increases transparency in the researcher’s subjective role in conducting and analyzing research data (Darawsheh, 2014). In this way, readers can understand how the research may have been affected by the researcher’s philosophical assumptions. This allows the readers to make their own assumptions of the research based on their own beliefs. To

allow for reflexivity, a reflexive journal (Goldblatt & Band-Winterstein, 2016) was kept in a Microsoft® Word® document for chapters three, four, and five (see Appendix N). This allowed me to write about the data collection and analysis processes for each specific chapter and reflect on how my beliefs, values, and biases may have affected the research (Watt, 2007). In addition, an overall PhD reflexive diary was maintained on a Google® document and shared with the supervisory team to encourage discussions. Reflections from each study are provided at the end of the relevant chapters (two, four, five, and six).

Close collaboration with the interviewees was sought throughout the research process (Creswell & Miller, 2000). For example, discussions were had with coaches prior to the interviews about previous common experiences in coaching to build rapport between the researcher and each individual coach. The close collaborations that I built with the interviewees throughout the research enhanced the quality of the data by involving the coaches as co-creators of knowledge during data collection and by allowing their experiences to come to the fore (Creswell & Miller, 2000). For example, interviewees were primarily allowed to control the direction of discussions during the interviews and, in chapters four and five, completed tasks during the interviews which provided them with increased jurisdiction (Brinkmann, 2007). The co-produced data was presented using thick, descriptive quotes that best represented the detailed accounts of the interviewees and to allow their experiences to be at the forefront (Ponterotto, 2006). This is important for qualitative research because any single behavior or interaction when divorced from its context, could mean any number of things (Ponterotto, 2006).

Each study within this thesis was also evaluated according to the worthiness of the topic. Specifically, the topics were assessed according to their relevance,

timeliness, significance, interest, and or evocative nature (Tracy, 2010). It is proposed that research that is counterintuitive, questions taken-for granted assumptions, and or challenges well-accepted ideas is often worthwhile (Tracy, 2010). This thesis aims to do this by researching a topic in social support that has not yet been studied among a population that is receiving growing interest. In addition, it looks to offer practical recommendations to coaches, practitioners working with coaches, organizations, and NGBs to enhance coach development and PWB. The final research quality criteria used during this thesis was meaningful coherence (Tracy, 2010). This criterion is whether a study achieves what it states to and uses methods and procedures that are appropriate to assess the stated aims. Studies that are meaningfully coherent interconnect the research paradigm, design, data collection, and analysis with the aims of the study.

In this thesis, meaningful coherence was achieved by the study designs and data collection techniques used during this program of research (e.g., SNA in chapter three, interviewee-aided photo-elicitation in chapter four, and multiple case study in chapter five) connecting with the social constructionism paradigm by providing the interviewees with increased influence on the data that is collected whilst diffusing researcher-interviewee power (Brinkmann, 2007). Thematic analysis used in chapters three, four, and five, aligns with the paradigmatic assumptions and methods used by allowing interviewees experiences and perceptions of social support to come to the fore (Braun *et al.*, 2014). Another path toward achieving meaningful coherence is ensuring that the reviewed literature situates the findings, the results relate to the stated research questions or foci, and the conclusions and implications meaningfully interconnect with the literature and data presented. This program of research did this by utilizing a bottom-up approach where each study informs and or

connects with another study in the thesis. For example, the systematic review in chapter one provided a scoping study that informed the focus of chapter three on social support networks by highlighting the influence of social support as both a possible stressor (e.g., a lack of social support) and as a way of coping with stressors (e.g., friends providing a distraction from coaching).

2.6. Chapter Summary

This chapter has provided an outline of the qualitative methodologies and methods employed throughout this program of research. It highlights my relativist ontology, constructionism epistemology, and social constructionism paradigm that underpin this thesis. Attention has also been paid to the data collection techniques employed during this program of research, along with a rationale for why they have been used. In chapter three, interviewee-aided sociograms are used to explore male and female sports coaches' social networks structures and the dynamics between the individual and his or her network members. Interviewee-aided photo-elicitation was employed during chapter four to gain and understanding of coaches' perceptions of their social network and to elicit further discussions on social support resources. An exploratory multiple case study approach was adopted for chapter five to holistically explore female soccer coaches who hold a UEFA B license social support functions. To complete this chapter, the ethical procedures and research quality criteria (reflexivity, close collaborations, thick quotes, worthiness of topic, and meaningful coherence) implemented throughout this thesis have been outlined. The succeeding chapter presents the first empirical study that was conducted for the purpose of this thesis. The chapter qualitatively explores sports coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support.

Understanding Social Networks and Social Support Resources with Sports Coaches

The systematic review presented in chapter one underlines the copious number of stressors that coaches encounter (e.g., expectations from self and others, administration, athlete performance). The results highlighted that social support is an important way for coaches to cope with stressors by means of providing positive effects on performance and PWB. Studies also suggested the potential support avenues coaches use when coping with stressors (e.g., assistant coaches, family). However, whilst 22 studies reviewed in the systematic review provided results on social support, there are currently no published articles that focus solely on this phenomenon or social networks with sport coaches. Concentrating on social support will advance the social support literature by exploring it with a population it has not yet be studied with. It will also provide applied implications by providing coaches and practitioners with recommendations to develop and maintain effective relationships that enhance performance and increase PWB. Chapter three extends the systematic review and develops the current social support literature by concentrating on social support and social networks with sports coaches to assist coping with stressors.

This chapter represents the first study of research in this thesis that explores social support with coaches. Guided by the social support conceptualization offered in chapter one, the main focus of this chapter will be to explore the social network structure of coaches. Overall, this chapter aims to qualitatively explore male and

female coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. Investigating social networks can provide researchers with an understanding of the important relationships that coaches use to cope with stressors. From this, research can focus on the specific dyadic relationships of coaches (e.g., coach-romantic partner relationship) and the effects of these interactions on PWB. Understanding coaches' social networks can also have applied implications for the sports coaching literature. In particular, coaches can recognize where they may require additional support in their network to cope with stressors. Furthermore, NGBs and local organizations can inform coach education programs that teach coaches on what an effective social network may look like and how this can enhance performance and progression within the profession. This chapter will start by discussing relevant sports coaching and social support literature before highlighting the specific methods used during this chapter. To explore the social network structure of coaches, this chapter uses an innovative data collection technique of SNA. The results are highlighted and discussed in relation to previous research. Once future research directions have been identified, a conclusion and summary of the chapter is offered.

3.1. Review of Relevant Literature

Social support can have a significant influence on the health and PWB of an individual (Lee, Chung, & Park, 2018). If coaches have greater supportive relationships and encounter more positive coaching experiences, they may have more intentions to stay in the profession. This is particularly beneficial with female coaches who have been reported to have lower intentions to progress as a coach than male coaches (e.g., Sagas, Cunningham, & Pastore, 2006). On the other hand, some empirical papers have suggested that social support only offers minimal benefits to

health (Bolger & Amarel, 2007; Gleason, Iida, Bolger, & Shrout, 2003; Siewert, Antoni, Kubiak, & Weber, 2011). This literature has put forward that perceived support may highlight one's incompetence's or lack of self-efficacy (Bolger & Amarel, 2007), may draw attention to the possible burdens on the provider of support (Gleason *et al.*, 2003), or may not match the needs of the recipient (Siewert *et al.*, 2011). However, published reviews on social support and health have concluded that overall, social support has a predominantly positive effect on health outcomes (Ell, 1984; Gallant, 2003; Rueger *et al.*, 2016; Uchino, 2006). Overall, despite the majority of research advocating social support as having positive health benefits, there are still some discussions on the effectiveness of social support. It is important to develop this knowledge, particularly in a stressful occupation such as coaching, to ensure that individuals can work at their optimum.

The social support literature suggests that the structure of the social network may have a powerful influence on the use of supportive resources (Thoits, 1982). It is also possible that the number and structure of an individual's social ties matters less than the possession of at least one close tie (Thoits, 1995). However, the association between the structure and resource aspects of social support have not often been studied (Thoits, 1995), particularly in the context of sport. This is problematic because it is only once social support resources are specified and the structures of social networks are explored that the role of social relationships in supporting individuals can be understood (Thoits, 1982). This is particularly pertinent with coaches that are working in a demanding profession and encounter stressors relating to funding, athlete behavior, and maintaining relationships (e.g., athletes, parents, other coaches; Robbins *et al.*, 2015). If coaches do not have an effective social network, this may have an effect on whether they receive the

appropriate types of social support resources to cope with stressors. Research on social network structures would benefit coaches by educating them on how to create a social network that is effective in helping them to develop as a coach and cope with stressors. The current study aims expand on the current social support literature to explore coaches social network structures and social support resources so that advice can be offered to support coaches during potentially stressful periods (e.g., a losing streak, or making selection decisions). This will also develop on previous sport coaching research as increased support for coaches may help them to cope more effectively with stressors which will increase their PWB (Lakey & Orehek, 2011).

Within the sporting context, social support has been investigated among athletes (e.g., Freeman & Rees, 2010; Kristiansen & Roberts, 2010), particularly during injury rehabilitation (e.g., Mitchell *et al.*, 2014; Rees *et al.*, 2010). Collectively, the findings in this area reinforce the importance of social support to provide positive relationships (e.g., with their coach) that allows athletes to perform well, enjoy the competitive experience, and assist recovery from injury (Kristiansen & Roberts, 2010; Rees *et al.*, 2010). The investigation of social support among coaches has been less comprehensive and lacks depth of understanding (see systematic review), which restricts conclusions on effective social support for coach's development and PWB. This knowledge would contribute to the social support and sports coaching fields by understanding how coaches use social support to enhance their coaching and PWB as well as the importance of social support and positive relationships to enrich performance and enjoy the coaching experiences. Acknowledging that social support may indeed buffer the negative outcomes of stressors (Cohen & Wills, 1985), it seems crucial to first understand the structure of and resources for social support among sports coaches so that guidance can be

offered about how coaches can use social support to enhance their development and PWB (Nurullah, 2012).

When exploring different methods that can be used to investigate social networks, SNA (Wäsche *et al.*, 2017, see also Chapter two) represents one promising research method. In this study, a qualitative SNA technique was used to understand the relationship dynamics within the social network and the social support resources that the network members provide. One qualitative method that allows social network structures to be illustrated and can facilitate discussions of the resources offered by the network members is interviewee-aided sociograms (Chapter two; Hogan *et al.*, 2007; Quatman & Chelladurai, 2008). The structures of social networks are demonstrated through diagrams that show connections among support and the locality of the support to the individual within that network (Hogan *et al.*, 2007). Whilst this method has not been used widely in sport psychology, it has been reported to be potentially useful for studying social networks with athletes in team sports (Lusher *et al.*, 2010). By understanding the social networks and support resources among coaches we can get an insight of coaches' social network structures and the social support resources that the individual's in the network provide.

It is apparent that social support could be an effective tool for coaches, particularly when coping with stressors (Knights & Ruddock-Hudson, 2016). However, published literature lacks specific explorations of social network structures and social support resources that could be used to enhance coach development and PWB (see systematic review). Therefore, further research is needed in the sports coaching literature to understand the structure of coaches' social networks and support that coaches require that can inform coach education on how to develop

effective social networks and advise researchers on the social support resources that coaches use so that further quantitative and qualitative research can be conducted on the influence of specific types of social support resources (e.g., appraisal support), particularly when coping with stressors. It is surprising that, despite extensive searches of electronic databases (e.g., Web of Knowledge, PsycINFO, PsycARTICLES), no published literature focusing solely on social support among sports coaches was found. The aim of this study was four-fold: to examine male and female sports coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. This aligns with the aims of the PhD to use a novel and appropriate research data collection technique to explore the social networks of male and female sports coaches across a variety of contexts.

3.2. Methodology and Methods

3.2.1. Interviewees

Coaches were purposefully selected (Patton, 2002) to recruit 'information rich' individuals. Snowball sampling (Robinson, 2014) was also used to recruit interviewees which involved asking the coaches selected during purposeful sampling to identify other potential coaches. Interviewees were identified through emails to local clubs and contacts from myself and the supervisors. In total, eighteen coaches were contacted via email and invited to participate in the study. Six male and six female coaches ($n=12$; $M_{\text{age}}=34.20$, $SD=13.37$, $M_{\text{experience}}=13.20$, $SD=10.41$ years) volunteered to take part in this study. At the time of data collection, each individual was working part-time as either a head ($n=8$) or assistant ($n=4$) coach. Coaches were either employed by an organization ($n=4$) or volunteered ($n=8$) and worked with

youth (n=7) or adult (n=5) athletes. Six of the twelve coaches were working closely with another coach. Each coach represented a team (handball, hockey, rugby, soccer, tchoukball) or individual sport (athletics, disability tennis, tennis, squash) and held a different coaching qualification that ranged from level one to level five ($M_{level}=2.42$, $SD=1.32$) in their respective sport. These levels of coaching qualifications carry different connotations depending on the sport (for example, a level three coach in athletics is different to a level three coach in soccer).

3.2.2. Study Design

The current study used semi-structured interviews to collect data on sports coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. To explore the main focus of the study, sociograms were used during the interviews to collect information on coaches' social network structures (Ryan *et al.*, 2014). Sociograms provide researchers and interviewees a visual representation of the coaches' social networks. The visual representation of the social networks can elicit additional memories from the coaches and therefore, consist of additional information relating to their networks that would not have been found if solely using interviews (Ryan *et al.*, 2014). Using this technique alongside interviews provides the coaches an opportunity to discuss their social networks and the relationships they have with those network members. The use of sociograms also aligns with the epistemological approach that guided this study by offering coaches the opportunity to co-create the data and lead that section of the interview (Burr, 2015). Therefore, sociograms were deemed most appropriate for use in this chapter to provide novel, in-depth data on coaches' social network structures and the attributes that connect

them to their support members (Marin & Wellman, 2009).

3.2.3. Data Collection

3.2.3.1. Interview Guide. In line with previous literature with sports coaches (e.g., Didymus, 2016; Thelwell *et al.*, 2010), a semi-structured interview guide was developed specifically for this study (see Appendix G). The interview guide contained four sections. The first section focused on the coach's demographic information and coaching background. This was followed by a section of questions on coaches' perceptions of social support (e.g., "When I say social support, what comes to mind?"). The third section of the interview guide incorporated questions on the situations where coaches use social support (e.g., "What is your experience of social support during coaching?") This section also pertained questions on social support resources (e.g., "What kinds of social support do you use?" and "What did that look like in practice?"). The fourth section of the interview guide required the coaches to complete an interviewee-aided sociogram that aimed to explore the structure of coaches' social networks (Hogan *et al.*, 2007; Ryan *et al.*, 2014).

In line with previous research (e.g., Kuhns *et al.*, 2015), the interviewee-aided sociogram consisted of four concentric circles (total size of sociogram=10.7cm) that had been prepared electronically and printed prior to the interviews (see Appendix H). The sociograms consisted of each coach being asked to imagine that they were in the center of the four circles and to write their support structure within the circles. Coaches were instructed that the closer they put each element of support to themselves in the center, the more influential it was in his or her social network. Similarly, instructions were given to specify that the further away the support was from the center, the less influential it was. The populations that

represented different avenues for social support (e.g., peers, family, and friends) were recorded in different colors. Interviewees were encouraged to put the full names of their social network members on the sociograms to allow for further discussion and to assist me in better understanding their network structure.

At the end of this section, the researcher asked questions about the task (e.g., “Tell me more about each of the people who you have included on the sociogram”), which afforded the coaches opportunities to explain their sociogram and to add anything that they felt was relevant to the prior sections of the interview. In the course of turning the sociograms into ego-network diagrams, the names of the individuals within the network structure were removed and replaced by the population name (e.g., friends, family) to keep confidentiality. All interviews were conducted face-to-face in August, September, and October 2016, and transcribed verbatim. The interviews lasted between 55 and 154 minutes ($M_{\text{length}}=78.72$, $SD=25.53$ minutes).

3.2.3.2. Pilot Study. A pilot study was conducted with one tchoukball coach to practice using the interview guide and the interviewee-aided sociogram, and assess how well these two methods facilitated co-construction of knowledge that was relevant to the research aim (Sampson, 2004). The coach who participated in the pilot study was a level one tchoukball coach who was coaching in the U.K. and had six years of experience at the time of the interview. During the pilot phase, the interviewee reported that the wording of the questions was clear and that no changes to the guide were required. Exploration and discussion of the pilot data between the research team members highlighted that the guide was appropriate for the main data collection phase but would benefit from one minor refinement. Specifically, the

question “How do you make use of social support?” was changed to “How do you use your social network?” to more effectively target the question at the knowledge that I sought to co-construct. Due to the absence of change to the interview guide, the resulting interviewee (Ruby) and data from the pilot study were included in the main data set.

3.2.4. Data Analysis

The abductive approach to latent thematic analysis that was described in chapter two manifested in this chapter. For example, when analysing the inductive theme of why coaches use social support, it was clear that these could be grouped according to the four types of social support resources that have been discussed in other published literature (Rees & Hardy, 2004) without changing their meaning. The interviewee-aided sociograms were analyzed using NodeXL to create an ego-network diagram for each coach involved in the study (Borgatti *et al.*, 2018). In ego-network diagrams, nodes represent individuals within a network. This means that the individual who is being focused on (i.e., the coach) can be represented diagrammatically with the other nodes that they are connected to (Borgatti *et al.*, 2018). The methods of data analysis selected for this chapter complement social constructionism as it provides an insider perspective of each coach’s individual social network alongside an outsider view of the network structures (Edwards, 2010).

3.3. Results

The results are presented in four sections that align with the four-fold aim of the study: perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. To enhance trustworthiness and research quality of the thesis (see also chapter two), results are presented as thick quotes from the interviewees to allow the voices of the coaches to be at the fore whilst providing insight to the coaches' subjective experiences of social support (Ponterotto, 2006). Within the second subsection (i.e., that focused on the structure of coaches' social networks), ego-network diagrams are used to illustrate the locality of support within coaches' networks.

3.3.1. Coaches Perceptions of Social Support

This higher-order theme relates to how sports coaches define social support and perceive the importance and effectiveness of social support on their PWB and coaching career. In total, this high-order theme contains a total of 102 raw data codes, ten raw data themes, and three lower-order themes (see Table 10): what social support means to coaches (e.g., mentorship), the importance of social support (e.g., during coaches' careers), and the effectiveness of social support (e.g., becoming a better coach).

Table 10

Coaches Perceptions of Social Support

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Mentorship Network of people around them (11) Trust (7)	What social support meant to coaches (12)	
Daily basis (12) Across career (12)		
Don't think about social support (4) Don't think about social support, something that is there (8) Think about social support	Importance of social support (12)	Coaches Perceptions of Social Support (12)
Better coach (9) Create opportunities (2) Hinder coaching (7) Improve well-being (2)	Effectiveness of social support (12)	

Note. Numbers in parentheses demonstrate frequency counts on the number

of coaches reporting that theme. If no number is included then this was reported by only one coach. The same approach to data representation has been applied in Tables 11-13.

3.3.1.1. What social support means to coaches. This lower-order theme represents how coaches defined social support. Eleven coaches said that social support to them was the network of people around them when needed. One example comes from Liam, a 22-year-old, level two, volunteer assistant youth hockey coach, who described social support as: "...all the people around me that help me on a regular basis whether it is on the pitch, like when I'm coaching, or off the pitch when I'm stressing and panicking bout the next game and that sort of stuff..." In another example, Terry (23 years old, level two, volunteer head youth tennis) defined social support as:

That network of support that's basically there for you when you need it . . . you've got coaches obviously [who] are providers of social support. You've got family, teachers. Those sorts of people that are in that role of helping you when you need it.

It was emphasized by seven coaches, including Steph, a level two head soccer coach, that social support, in whatever form, required a high level of trust and that if trust was not present, a barrier to social support was formed:

So, anyone can give you advice but you don't just want to get it off anyone do you? You want to get it off someone you can trust. I think that it [trust] is also a barrier to it [social support]. They [individual] might be there but possibly I think that some [network members] may get utilized but some just not for that reason as well.

3.3.1.2. *The importance of social support.* This dimension encapsulates how coaches perceived the significance of social support on a daily basis and across their coaching careers. In total, seven coaches described day-to-day support as important. In the following example, Shaun (56 years old, level five, employed, head youth tennis coach) was discussing how he perceived there was lack of social support in tennis yet how beneficial receiving social support can be:

I find it [social support] intriguing because you are talking about sport, how you coach, listening to how others do it, their communication styles, their delivery, how they coach something, how they . . . I mean come on! You cannot put a price on it [social support]. Even if you go "I'm not doing that, I'm not doing that, oh wait a minute, I love that! I am going to put that in." It's priceless, it's priceless.

In another example, Ruby (25 years old, level one, assistant volunteer adult tchoukball coach) highlighted that, whilst social support was important to her, she felt that it was not discussed enough among the coaching community:

...because I am thinking about it now, I'm actually thinking that, yeah, I use it quite a lot without actually realizing it. So yeah, I think it [social support] is quite important but is not always talked about or advertised...

With reference to the importance of social support across their coaching careers, eight coaches highlighted that they thought it was important. Katie (31 years old, level three, employed head youth squash coach) spoke about how her support had helped provide opportunities for her to develop as a coach:

...social support has been a big part of it [coach development] because it has been the people that I have known that allows me to get into the different areas that I have. Like here being on the scholarship you know, given that they [university] knew me and chatted to me about the role that were coming up so umm, that was my, came through my support team...

Whilst social support was considered as important to the majority of the coaches during their careers, Ruby (25 years old, level one, assistant volunteer adult tchoukball) mentioned that its importance increased during certain situations:

...at times, particularly when you're doing a qualification or just kind of getting to know your team or whatever, it [social support] can be very important . . . so, personally, I think it goes a bit like in peaks and troughs like there will be times, so say like in football when I was doing my

[coaching] assessment, it was quite important because I would go to mentors or more senior people, people who had already passed the qualification at the center and be like “what do you think about this session?” Or “I did this and it didn’t go so well” and they were like “shit happens. It don’t matter” and that sort of thing.

Interestingly, despite coaches perceiving social support to be important, when coaches were asked whether social support was something that they thought about, three coaches, such as Jade (24 years old, level one, volunteer assistant youth soccer coach), suggested that they do not explicitly think about social support: “But in terms of thinking about it, it doesn’t really cross your mind because you try and do it all yourself sometimes.” A further eight coaches, including Maria (44 years old, level one, volunteer head youth soccer coach), explained that whilst they did not think about social support, this was because they already felt supported: “No it’s [social support] not [something I think about]. But I guess if social support wasn’t there . . . I feel quite supported in what I am doing. I guess if I didn’t then it is something that I would think about.”

3.3.1.3. Effectiveness of social support. Turning to the lower-order theme of whether coaches perceived social support to be useful, nine of the coaches mentioned that social support had made them a better coach. Liam (22 years old, level two, volunteer assistant youth hockey coach), for example, discussed how social support had allowed him to enjoy and focus on his coaching: “...I’m a better coach [because of social support]. Umm, and I don’t know, I enjoy my coaching more because I trust all the people I am with whether it is the coaches or the admin.” Athletics coach Josh (38 years old, level three, volunteer head adult coach), called

attention to his perception that, even if social support was not helpful or important at the moment that it was received, it could be helpful in the future:

Yea, it [social support] has been helpful. All elements [of social support] have been helpful even if the answers they have given have not helped at that moment in time because it gives you . . . it gives you another thing you can put in your batman utility belt that you have to try at a moment in time. It might not work for that moment in time, but if you kind of remember it, log it, and try it somewhere else it might work in the future.

On the other hand, seven coaches discussed how social support can hinder their coaching in certain circumstances. Specifically, Lucy (42 years old, level four, volunteer head adult disability tennis coach) discussed a time when conflicting advice from her social network disrupted her coaching:

...if I've kind of gone and sought advice and I've got either conflicting advice or I have got advice from everywhere that I can think of getting advice from but I am doing that just to put off making the decision, that is where it hasn't helped.

3.3.2. Coaches Social Network Structure

In total, I created 429 raw data codes that represent the structure of the coach's social networks (see Table 11). A total of 41 raw data themes I created from these codes were then organized into four lower-order themes: peers (e.g., other coaches), friends (e.g., best friend), family (e.g., parents), and miscellaneous (e.g., internet). The lower-order themes within this subsection are presented as quotes from the coaches and the network structures are represented by an individual ego-network

diagram for each coach.

3.3.2.1. Peers. Each of the 12 coaches reported that they turn to other coaches for social support. More experienced coaches than themselves were discussed most often, as described by Phil (61 years old, level four, employed head adult rugby coach): “I talk to other coaches, you know, professional coaches.” The following quote, from level one volunteer soccer coach Jade, illustrated how mentors can provide informational support by offering advice on the next steps during coaching:

...for example, last year I got an FA mentor which was quite . . . a really good source because I had just started off, well I hadn’t just started off coaching but was newly qualified and was like what else do I do now? What do I do in terms of tailoring the session? And this, that, and the other. So, it were nice to have someone there to comfort me and say you are doing the right thing, but I will offer you more advice to do something else.

Work colleagues were cited by eight coaches as people who they turned to for support. Support staff such as physiotherapists, strength and conditioning coaches, administrators, and technical directors were also discussed by the coaches as sources of social support. Phil (61 years old, level four, employed head adult rugby coach) gave an example of receiving informational support from work colleagues if he had a work problem: “I have got a great line manager here and umm, the coaches here have all got different experiences and different values so I wouldn’t hesitate to ask if I had a problem. You know, why keep it to yourself?”

Table 11

Coaches Social Network Structure

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Committee (3) Experienced coaches (12) Less experienced coaches (4) Mentor(s) (6) Previous coach (5) Support staff (4) Work colleagues (8)	Peers (12)	Coaches Social Network Structure (12)
Brother (2) Children (4) Cousin Dad (8) General family (7) Grandmother Mum (9) Niece and nephew Romantic partner (9) Sister (4)	Family (12)	
Best friend (7) Friends (9) Housemates (2) Players (6) School friends (2)	Friends (11)	
Animals (2) Business people (2) Continuous professional development Internet (8) National governing body (2) Players parents Previous experiences (2) Sport and exercise (2) Sport psychologist Teachers (3) Writing in a journal	Miscellaneous (12)	

Peers were the most common population, represented 53 times by all the coaches on the sociograms (see e.g., Figure 4), as illustrated by the close ties between the coaches themselves and their peers. The following quote from Steph (24 years old, level two, employed head youth soccer coach) supports this finding:

Because I think in terms of support, I feel like she [the coach] has given me the most or has been the most effective . . . and [coach] is a couple of years older than me. She's kind of done various other things like I've done in terms of the coaching pathway.

However, whilst coaches and work colleagues appear to be regularly used by coaches, these were generally not the *most* significant people within the coaches' networks (see e.g., Figure 5).

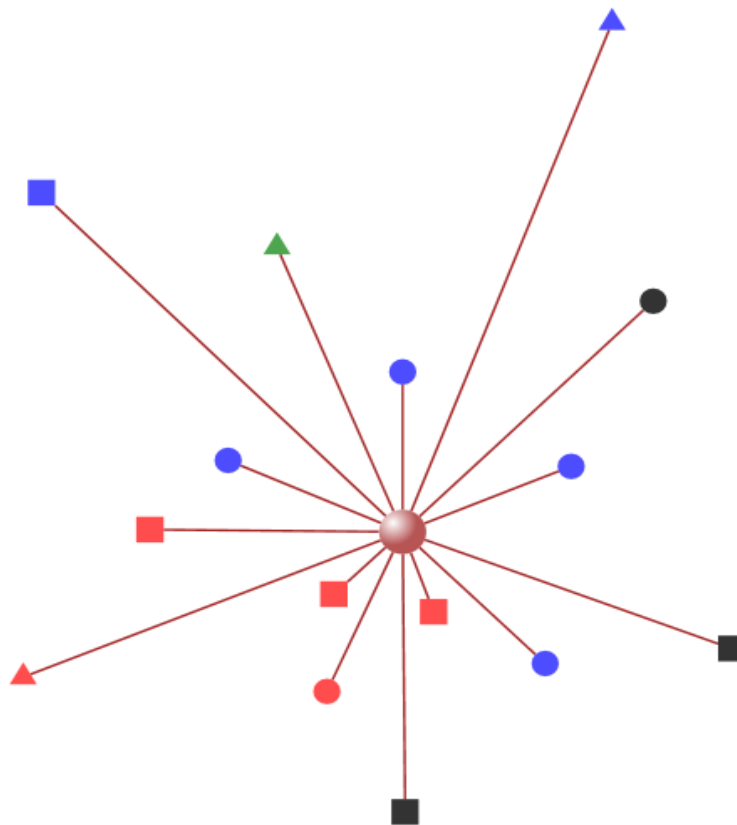


Figure 4. Ego-network diagram for coach Joe. Joe is represented by the brown sphere in the center of the diagram. The network is then organized by shape (female=circle, male=square, and miscellaneous objects=triangle), color (black=family, blue=friends, red=coaches/work colleagues, green= miscellaneous), and length of tie (short tie=close relationship, long tie=less close relationship). The same methods of illustration have been applied to each of the other network diagrams in this chapter (see Figures 5-15).

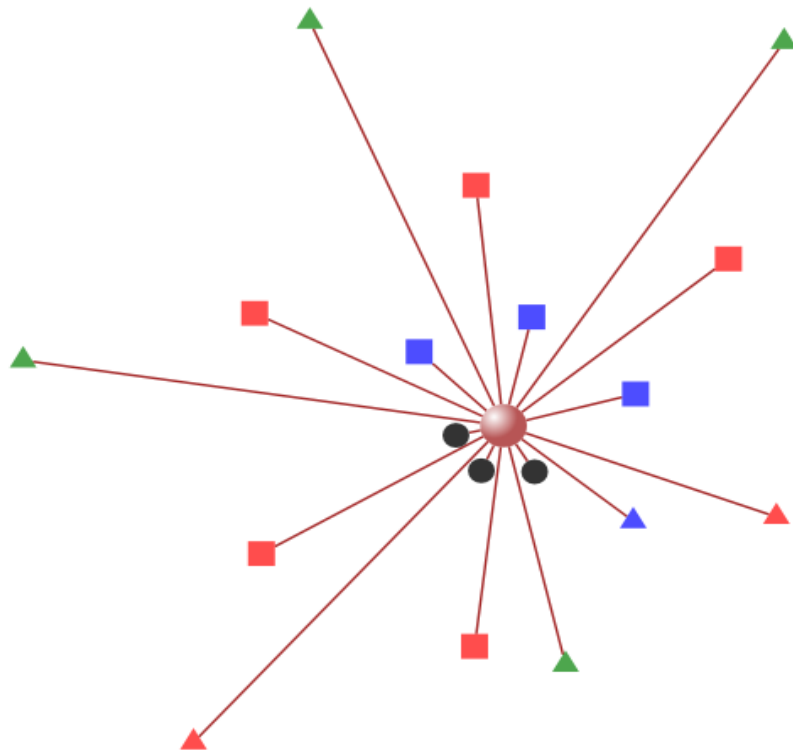


Figure 5. Ego-network diagram for coach Shaun.

3.3.2.2. Friends. Further to drawing on coaches and work colleagues, the ego-network diagrams revealed that friends played an important part in coaches' social networks. Friends were often used to help coaches get distance from their profession. Katie (31 years old, level three, employed head youth squash coach), for example, spoke about going out with her friends to distance herself from coaching:

I like that I have friends that are away from it all and out of it all, err, so I can go there and not think about [coaching]. So, I suppose it is a network or a support because it is a chance to get away and forget and they ask, it's not like they are not interested, just, it's a time where we try not to get too involved in that kind of stuff [coaching] and just catch up more on what goes on outside of work life. Which is something I don't get that much of, life

outside of work. So, when I am with them, I try to keep it that way as supposed to using them that way.

In particular, coaches frequently turned to their best friend or their housemates for emotional support as the following quote from Jade (24 years old, level one, volunteer assistant youth soccer coach) suggests:

...my boyfriend and my best friend, so like . . . they understand what I am trying to achieve and what I want in my career and this is sort of one of the stepping stones on that ladder. So, they are there to sort of offer me advice, even though they are not qualified in that area.

However, despite friends being cited as an important source of support, soccer coach Steph (24 years old, level two, employed head youth soccer coach) highlighted how she was wary not to draw on them too often because she did not want her friends to begrudge her:

I think in the back of your mind you don't want to become that person. Say if I go to a housemate after every session and say this happened, this happened. I don't want her to be like bloody hell . . . I don't want her to think that when she comes home from football just chat about how bad it was. That's why I am also careful about when I use it.

Six coaches referred to the players who they coached as friends and, thus, social support resources. Ruby (25 years old, level one, volunteer assistant adult tchoukball coach) provided an example of turning to her players to help her understand how she could assist them with a tchoukball technique:

...this one girl [player] was struggling to get a flat, like a zero-degrees

shot to go straight along the line so I talked to her quite a lot in terms of what wasn't she getting and she was able to help me quite a lot in terms of understanding what she was struggling with.

The ego-network diagrams show that friends were consistently an important source of support for the coaches (n=41). The majority of friends were placed towards the middle of the diagram as shown by level one head soccer coach Maria, for example (Figure 6). These tended to be the *most* significant people within coaches' networks. Level two head tennis coach Terry advised that the people who he trusted the most tended to be the most significant individuals: "Because probably they are the people, I trust to give me the advice. They are the people I trust more than any of the other people."

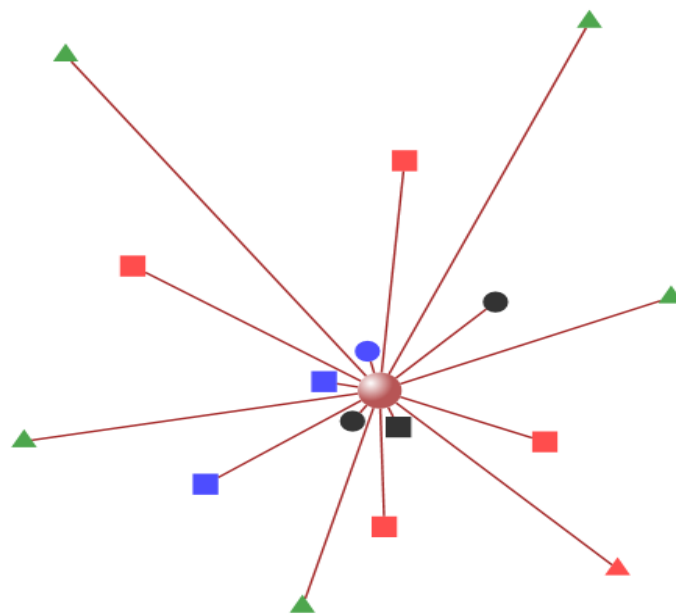


Figure 6. Ego-network diagram for coach Maria.

However, some network diagrams show that friends can be both close and distant within the structure of the social network (see e.g., Figure 7). It was

mentioned by level one volunteer tchoukball coach Ruby, for example, that the closeness of friends to the center of her sociogram depended on the regularity in which she sees them: “...yeah, it’s just like they are all [people closer to the center] just people that I see regularly, interact with regularly and that I feel comfortable going to if I wanted some advice.”

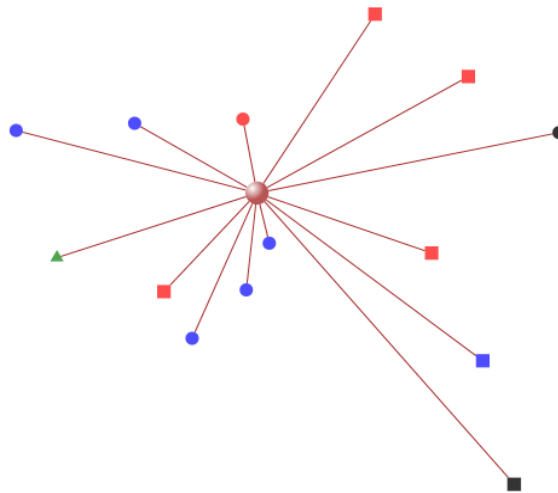


Figure 7. Ego-network diagram for coach Ruby.

3.3.2.3. Family. Another cited source of social support was family. The most commonly cited family member who was in the coaches’ social support network was his or her romantic partner. Liam (22 years old, level two, volunteer assistant youth hockey coach), for example, mentioned that, without his partner offering all four types of social support resources, he would not have got to where he was at the time of data collection: “Umm, the better half. That’s got to be . . . Without them I don’t think I’d be able to do half the stuff I’ve done.” Parents were also commonly cited as important sources of social support. For example, Josh (38 years old, level three, volunteer head adult athletics coach) stated:

And I also kind of talk over stuff with my parents, my mum and my dad. My dad was an athletics coach for umm, he was, he was one of my athletics coaches as I kind of grew up so I kind of talk to him quite a lot about coaching and what might be going right and what might be going wrong...

Family members (n=38) were cited by each of the 12 coaches on their ego-network diagrams. The importance of family members within coaches' networks was, however, varied. For example, Shaun's (56 years old, level five, employed, head youth tennis coach) family (e.g., wife, mother, and children) were all important sources of support for him (see Figure 5) yet, for Steph (24 years old, level two, employed head youth soccer coach; Figure 8) and Jade (24 years old, level one, volunteer assistant youth soccer coach; Figure 9), while they turned to family for support, they did not see them as a significant source of social support. This is supplemented by the following quote from Steph:

None of my family really get football. So, I could tell them I've just started coaching with this club I am at or I'm on my UEFA B license and they are like "oh." They don't really understand what it is but like for me that is a huge achievement and I think that, I don't know, I think that would kind of come into your social support. If I had more of a driven family or that knew football, I think that would help as well.

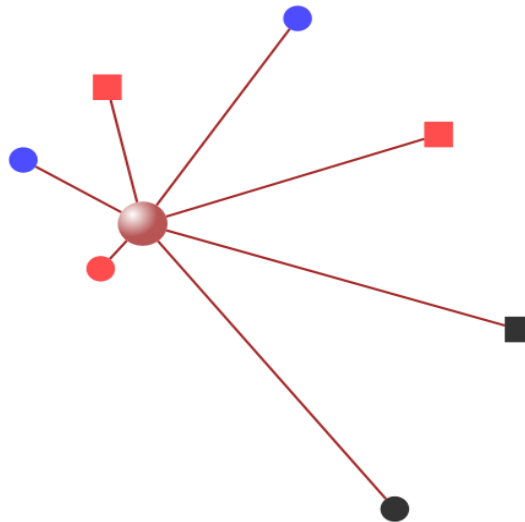


Figure 8. Ego-network diagram for coach Steph.

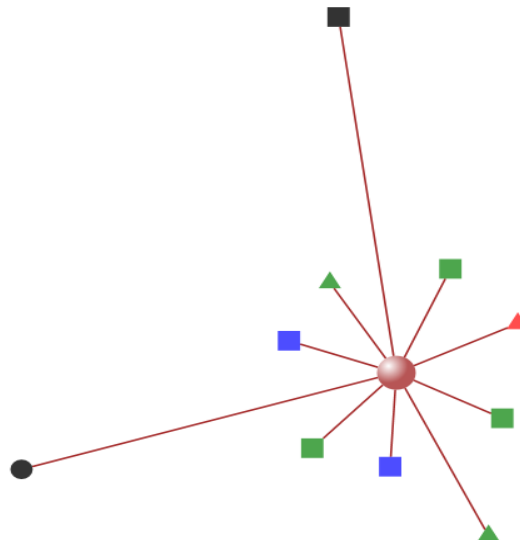


Figure 9. Ego-network diagram for coach Jade.

Other coaches, such as 38-year-old, level three head athletics coach Josh, reported that different family members vary in social support influence (see Figure 10). For example, Josh's wife and father were central parts of his social network, whereas other family members were less frequently called upon.

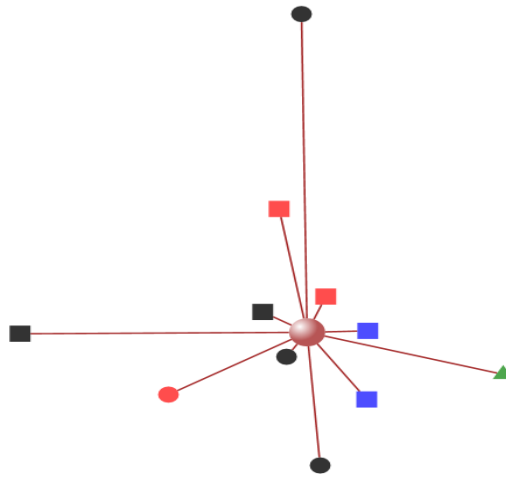


Figure 10. Ego-network diagram for coach Josh.

3.3.2.4. Miscellaneous. With reference to the miscellaneous lower-order theme, three coaches described how they used CPD events as forms of informational and appraisal support. These CPD events offered them opportunities to learn new information (i.e., informational support) and to gain feedback from other coaches (i.e., appraisal support), as described by Jade (24 years old, level one, volunteer assistant youth soccer coach): “...the CPD sessions I have gone on with the FA. But obviously one of those is off my own back. You’ve got to be willing to be criticized and learn as well.” Coaches also cited their participation in sport and exercise as a form of instrumental social support. Lucy (42 years old, level four, volunteer head adult disability tennis coach) described how the act of playing sport, in addition to the social aspect of doing so, offered her support by being able to distance herself from coaching:

I play badminton, which goes against everything to do with tennis and everything I’ve ever said in my life umm, but I actually enjoy a Monday night and Wednesday matches cause no . . . well, unfortunately, a few people do know me and that I do tennis but to most people I am just the average club

player that swears a lot when she misses the shuttlecock. Yeah, on the social side, the sport becomes the . . . that social support really.

In addition to person-to-person interactions, coaches highlighted that they use internet for informational support. Five coaches mentioned using coaching websites. Liam (22 years old, level two, volunteer assistant youth hockey coach), for instance, discussed how he used sports websites for information on training drill ideas:

Umm, he [coach] has also given me access to umm, BUCS sports plan cause obviously they have lots of drills and things on there so obviously I go on there and use his account and . . . Yea its online and has loads of different sports, hockey is obviously one of them, and you pay a certain amount a month and then you can just look at all the drills and get ideas off that or you can get stuff on, there are stuff on Facebook he has told me to look at and there's a couple of coaching, junior sections in the Netherlands, where they are really good at hockey, and put stuff up.

Miscellaneous sources of support were represented least frequently on the coach's ego-network diagrams (n=36) and were frequently placed as a less significant source of support (see, for example, Figure 9). Indeed, in one instance (see Figure 8) the coach did not include any miscellaneous sources of support in her network.

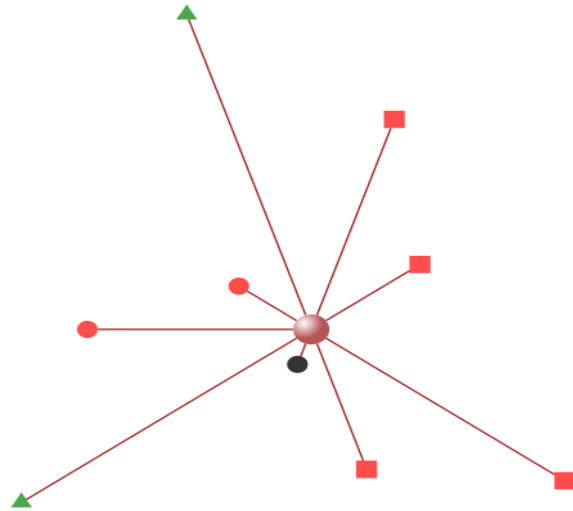


Figure 11. *Ego-network diagram for coach Liam.*

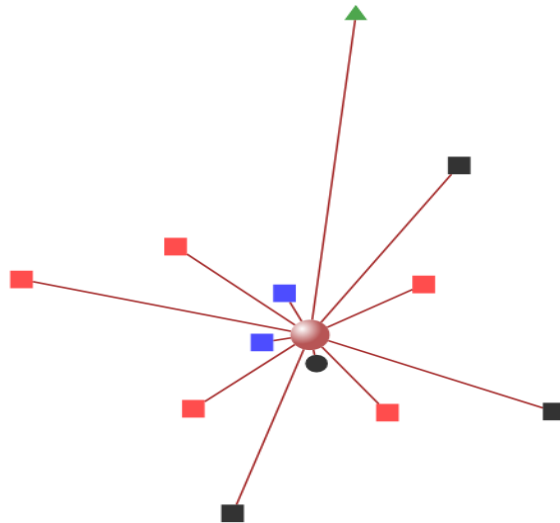


Figure 12. *Ego-network diagram for coach Phil.*

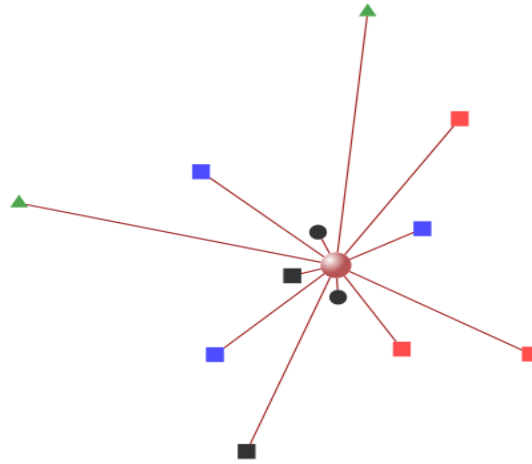


Figure 13. Ego-network diagram for coach Terry.

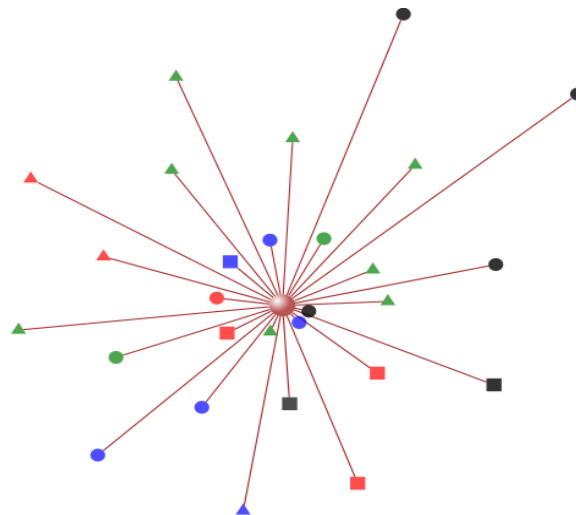


Figure 14. Ego-network diagram for coach Lucy.

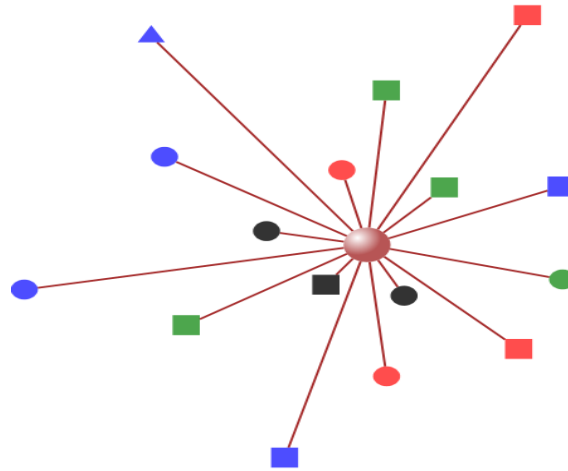


Figure 15. Ego-network diagram for coach Katie.

3.3.3. Coaches Social Support Resources

A total of 140 raw data codes were constructed that provide insight to the four different types of social support resources that the coaches used. I organized the codes into 12 raw data themes and, in turn, four lower-order themes that each represent a different type of resource (see Table 12): informational (e.g., advice), emotional (e.g., venting), appraisal (e.g., reassurance), and instrumental (e.g., partner looking after the children).

Table 12

Coaches Social Support Resources

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Advice (7) Coaching practice (7) Ideas (10)	Informational Support (12)	Coaches Social Support Resources (12)
Calming influence (2) To talk to and listen (6) Venting (7)	Emotional Support (10)	
Affirmation (7) Perspective (4)	Appraisal Support (8)	
Ability to switch off (4) Covering coaching sessions (4) Opportunities (6) Partner (2)	Instrumental Support (8)	

3.3.3.1. Informational Support. This section included data from each of the 12 coaches who described receiving support for the generation of ideas related to coaching practice (e.g., to bounce ideas), advice (e.g., technical), and general coaching matters (e.g., coach behavior). Ten of the coaches discussed that they used social support to bounce ideas and that this support came predominantly from other coaches. One example is from 22-year-old squash coach Liam:

[Social support is] really important because obviously to have those people there that I can bounce ideas off and just get ideas off them. And I just, at times I talk to them about ideas that I've got and they'll just let me potentially trial stuff and then we will sometimes recap and assess why it hasn't worked or maybe what we can do to make it better.

Coaches also commented on how they used social support to gain advice about their coaching practice. Terry (23 years old, level two, volunteer head youth

tennis coach), for example, discussed how he would gain advice from the local tennis community if he had a problem during his coaching role:

I would say that the coaching network in tennis is quite a close-knit community. It's quite close, they all like . . . I'm sure if I had a problem, I could go to someone and they would be able to help me or tell me what I'm doing wrong and just give me advice.

Moreover, coaches discussed how they would seek informational support to improve themselves as coaches. The following quote from Katie, a 31-year-old level three squash coach, illustrates how being connected with other coaches allowed her to observe and improve her coaching style: "...[I am] linked with coaches within the governing body to you know, improve my coaching abilities and, you know, to watch and develop and learn from them..."

3.3.3.2. Emotional Support. In addition to coaches turning to social support for information, ten coaches reported using emotional support as a resource to vent (e.g., about an athlete performance), talk and listen (e.g., about a training session), and seek a calming influence (e.g., helping them to relax). Being able to vent to friends and family about a perceived poor training session or a misbehaving athlete, for example, was important to coaches, particularly to head disability tennis coach Lucy:

...there are certain people in my life that we have this kind of rule that I can vent and then that's it and it's finished with. Umm, I've got . . . I've got a best friend who is also a coach and we coach in completely different, we coach the same sport, tennis, but we are in completely different coaching spheres. So, she is a club coach where I used to be about 20 years ago, and

you know, she is a very very good coach but we are in completely different fields but it's quite good because we've got a commonality of tennis and can both vent to each other.

Two coaches mentioned seeking support to help calm them down. Steph (24 years old, level two, employed head youth soccer coach), for example, clarified that emotional support from her friends stopped her from overthinking situations (e.g., how to improve training):

I think if anything, sometimes I just need someone to say you worry about it far too much or you're just completely overthinking and driving yourself crazy with it. But it's just striving for perfection and you just want it to . . . you want it to be good, you want it to improve, you want to improve yourself, and you want it to be the best you can.

3.3.3.3. Appraisal Support. Turning to appraisal related social support resources, the raw data themes related to affirmation (e.g., that the coach is heading in the right direction) and gaining perspective (e.g., seeking a second opinion). In total, seven coaches discussed the use of affirmation or recognition that what they were doing was correct as a form of appraisal support. For example, Phil (61 years old, level four, employed head adult rugby coach) spoke about seeking confirmation that he was going in the right direction:

Yeah, it helps you because it reassures you or points you in the right direction where you think you might be going at a tangent. As I have said before, you are not right all the time so you need to be told every now and then.

Turning to gaining perspective, 24-year-old employed soccer coach Steph discussed the usefulness of getting other points of view from soccer coaches, work colleagues, family, and friends about a situation at a previous club:

...at a previous club I was at, where it was getting to the point when I was walking away hating coaching, hating being there, hating being part of the club it was like “oh well, I want to be here for this reason.” But, actually, that is when I found I can rely on my support to kind of hear both sides . . . so I am not just getting closed minded, tunnel vision.

3.3.3.4. Instrumental Support. Eight coaches discussed using instrumental social support resources. This consisted of creating opportunities (e.g., observing other coaches), securing coach cover (e.g., for training), switching off from coaching (e.g., by going to a public house), and support from their partner (e.g., looking after the children). With reference to creating opportunities, six coaches spoke about how instrumental support had created opportunities for them to develop. One example came from soccer coach Maria (44 years old, level one, volunteer head youth soccer coach) who stated that she would not have had the same coaching opportunities made available to her if she had not had the social network that she did: “He [coach] made that approach for me to go to [club] and got the introduction so I guess if I didn’t have that relationship with him then that wouldn’t have come about...” Additionally, Josh (38 years old, level three, volunteer head adult athletics coach) spoke about the importance of the instrumental support that he received from his partner:

I will be away this weekend. We've got two sons so that puts a burden on her, so all of that sort of stuff kind of has a toll and the tangible support that [wife] would give, I wouldn't be able to continue coaching [without it].

3.3.4. Situations Where Coaches Use Social Support

Overall, I constructed 83 raw data codes that focused on the circumstances when coaches use social support (see Table 13). I organized the raw data codes into 14 raw data themes before subsequently organizing them into four lower-order themes: player issues (e.g., player behavior), training (e.g., planning), competition (e.g., team selection), and organizational issues (e.g., coaching qualifications).

Table 13

Situations Where Coaches Use Social Support

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Lack of players (4)	Player Issues (10)	Situations Where Coaches Use Social Support (12)
Personal problems (2)		
Player behavior (8)		
Struggling with something (4)		
Coaching practice (4)	Training (10)	
Feedback (2)		
Planning sessions (8)		
Poor training session (2)		
Preparation (2)	Competition (6)	
Tactics (2)		
Team selection (3)		
Issues with club		
Issues with NGB	Organizational Issues (5)	
Qualifications (3)		

3.3.4.1 Player Issues. In total, 10 coaches revealed that they turn to their social support resources for player issues, including player behavior, number of available players, and players struggling with a skill or technique. Ruby (25 years old, level one, volunteer assistant adult tchoukball coach), for example, described how she sought informational support from her housemates when working with disruptive players:

...my housemates are quite big for this [providing social support], umm, so like if something happens, let's say like, a few times I had a situation last year with a team I coached last year, the under 13's, 15 kids I think I had, there was four that were a bit rowdy and all stuck together. They were good players but messed around a lot and sometimes didn't make it a very nice environment for the other players to be in. And we had a situation basically where they were accused of bullying and we had to obviously dealt with it quite seriously and we had to drop a couple of them from the team for one of the games, so that was quite like, I felt like, oh shit what do I do in this situation, is it just kids being kids or is it, should I take it really seriously or is it my fault for not putting my foot down two or three months ago? . . . I was really stressed about the situation and I would ask my housemates who are both teachers, especially one of them who also coaches tchoukball. So, she, I can't remember what we talked about but she obviously talked about her experiences as a teacher in terms of obviously she deals with these types of experiences on like a daily basis...

In addition to player behavior, coaches discussed seeking informational support when a player was struggling to learn a skill or technique. For example, Lucy (42 years old, level four, volunteer head adult disability tennis coach) talked about seeking support from her peers to help improve a player's technique:

I remember working with a national under 10 girl, umm, and there was something that was slightly wrong with her technique, which was actually due to her movement, so we had the physios out, we had the S&C's [strength and conditioning] out and then the movement was actually due to something else that was going on so that was quite good when it wasn't just reliant on coach to work it out, there were others.

Four coaches highlighted that not having enough players during training and competition was a situation when they sought support. Maria (44 years old, level one, volunteer head youth soccer coach) provided an example of seeking informational support when needing to increase numbers for her soccer team:

...so, the support is there and again the same with the county [FA] when we were struggling with numbers or . . . losing numbers or need a bit of direction or ideas, suggestions. I always know I can just drop [coach] an email or give him a call.

3.3.4.2 Training. Further to player issues, eight coaches cited training as a common situation when they would seek support. For example, coaches reported turning to their social networks when planning training sessions. An example from Steph (24 years old, level two, employed head youth soccer coach) shows how she turned to work colleagues to discuss what she could do during training:

I've really enjoyed to be able to just sit with them [work colleagues] and be you know, "I got this topic tonight what did you do?" "Oh, I did this with this age group," and "oh right, well I can take some of that", and it makes a whole world of a difference because just to have someone on your wave length or that thinks similar to you or, you know, got that common ground in a coaching sense...

Coaches also turned to their social networks after training if they perceived that the session went badly. Two coaches, such as 25-year-old Ruby (level one, volunteer assistant adult tchoukball coach), described how they would seek support from friends if "the session didn't go very well" via emotional support to vent frustrations and appraisal support to gain another perspective.

3.3.4.3. *Competition.* Coaches discussed seeking support for competitions as well as training. One situation when coaches required support with competition was for team selection. Lucy (42 years old, level four, volunteer head adult disability tennis coach), for example, talked about when she was coaching for Great Britain and needed informational support when picking players: "I've been on the GB books, GB books as manager/coach, so when I took the teams away and did selection and that sort of stuff, I needed social support." Tactics was another situation for which coaches sought support. When deciding what formation his hockey team should play, Liam (22 years old, level two, volunteer assistant youth hockey coach) sought advice from the head coach: "If I need to bounce ideas off the head coach then I talk to him about what formation to play, erm, who to play where, what to do in certain situations and that sort of thing."

3.3.4.4. Organizational Issues. This theme relates to various organizational issues that the coaches sought support for, including coaching qualifications, issues with the sports clubs where the coaches were working, issues with the coaches NGBs, and issues that arose during qualifications. Three coaches mentioned that they had received social support from other coaches and their club when wanting to complete a coaching qualification. Jade (24 years old, level one, volunteer assistant youth soccer coach), for example, discussed how her soccer club provided instrumental support by helping with the process of applying for a coach education course: "...I think if you have a proactive club that puts you on courses, so if I want to go on any course then I can go on it, I think that is probably their way of supporting you." Moving on to issues with a club, Steph (24 years old, level two, employed head youth soccer coach) described seeking advice when she was starting to dislike working at a particular soccer club:

The most recent example is when a fall out with a club, or if I felt like something was making me feel really uncomfortable, umm, just ended up being at a place where I hated being part of it but I wasn't sure whether I should stay there and see it out or...and when it gets to that point, that's when I rely on it [social support]...

3.4. Discussion

The purpose of the study was to explore male and female sports coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. The findings highlight that the coaches perceive social support as the network of people around them who they can rely on when needed. Social support was also perceived to help

the interviewees become better coaches. The most frequently cited support resource was informational support to acquire advice but emotional, appraisal, and instrumental social support resources were also sought to help improve coach development. There were a variety of situations that coaches required support for. For example, informational support was used for training (e.g., drill ideas), advice about players (e.g., player behavior), and for coach development (e.g., coaching style). The structures of coaches' social networks consisted of peers (e.g., other coaches), friends, family, and, to a lesser extent, miscellaneous avenues of support (e.g., internet).

Interviewees perceived social support similar to that of the structural and resource-based definition offered by Cohen and Wills (1985) by describing it as a network that provides them support when required. This highlights that social networks and social support resources are important for an individual (Thoits, 2010). However, there is a significant body of social support literature that has discussed whether actually *receiving* or just *perceiving* that the social support resources are available from the social network is most effective for facilitating positive health and PWB (e.g., Barrera, 1986; Melrose, Brown, & Wood, 2015; Uchino, 2009).

Literature in this area suggests that the perception or belief that support is available appears to have a considerably stronger influence on health and PWB than the actual receipt of social support (e.g., Melrose *et al.*, 2015; Wethington & Kessler, 1986). It appears that people who have a strong psychological perception of social support are less likely to view events as stressful and therefore, fare better during times of adversity (Gottlieb & Bergen, 2010; Rees *et al.*, 2007). If sports coaches have a social network (i.e., peers and friends) that they perceive as strong and effective, this could assist them when coping with stressors. However, this chapter extends the

research by highlighting that some coaches may not be aware of the need for and the usefulness of social support. This is problematic due to coaching being a particular stressful occupation (Gould *et al.*, 2002) and the influence of social support when coping with stressors. This should be addressed by NGBs using coach education courses to instruct coaches on the importance of social support.

With reference to the structure of coaches' social networks, the use of a unique data collection technique to create ego-network diagrams that provides novel data on the structure of coaches' social networks, extends the current social support and sports coaching literature. Despite discussions relating to the structure of social support in previous literature (e.g., Bruening & Dixon, 2007; Frey, 2007), coaches' networks have not previously been illuminated in the detail that is offered in this chapter. For example, despite coaches having previously discussed using other coaches as social support when experiencing stressors (Knights & Ruddock-Hudson, 2016; Levy *et al.*, 2009; Stoszkowski & Collins, 2016), this chapter expands on this by demonstrating that the main sources of support for coaches were peers. This has important implications in coach development as a study exploring the learning approaches of coaches (Stoszkowski & Collins, 2016) found that social interactions with other coaches and colleagues during day-to-day coaching were the predominant source of support for guidance, advice, and information. The current study also advances knowledge in the sport coaching area by investigating the importance and influence of the social network members on sports coaches. For instance, whilst social support from peers has a significant influence on coaches, the ego-network diagrams showed that despite friends being cited less than peers, friends were the most important avenues of support for coaches. A reason for this may be because friends provide the widest range of support resources (Rosenfeld, Richman, &

Hardy, 1989). However, due to the high demands and unsociable working hours of the coaching role, coaches often feel that they are disconnected from their friends and family (Didymus, 2016; Frey, 2007; Levy *et al.*, 2009). If coaches do not have an effective social network, this can have negative implications on whether they receive the appropriate types of social support resources to cope with stressors which can have further adverse effects on their personal lives and relationships (Didymus, 2016).

Turning to the social support resources that are provided by the coaches' social network members, findings reinforce the social support notion that individuals, such as coaches, sought all four types of resources (informational, emotional, appraisal, and instrumental) as suggested by Thoits (1995) and Rees and Hardy (2000). Developing on the current social support research, this study found that the support resource cited most frequently by the coaches was informational, particularly to gain knowledge and advice related to coaching behaviors and or training drills. This is not surprising given that coaches have previously discussed the need to seek advice and knowledge to continually develop their skills (Erickson *et al.*, 2007). Within the sport psychology literature, no studies were found that have discussed each of these four types of social support with coaches, but similar results have been reported with athletes (see, for a review, Sheridan *et al.*, 2014). The findings of these studies note that informational, appraisal, emotional, and instrumental support can be offered to athletes by members of their social network. It may be that individuals develop their use of social support resources over time and or use different types of social support resources to cope with the same stressor (Rees & Hardy, 2000). Therefore, to advance the social support knowledge, the use of social support resources should be explored longitudinally.

The results that relate to the situations where coaches require social support resources highlight that coaches use social support when managing issues relating to players (e.g., player numbers), training (e.g., perceived poor session), competition (e.g., tactics), and miscellaneous (e.g., qualifications) situations. Support during training was commonly cited by coaches for generating ideas relating to training drills and to help recover from and reflect on poor training sessions. These findings are in line with coaching research that has consistently showed training to be a significant stressor for coaches (e.g., planning and running training sessions; Chroni *et al.*, 2013; Thelwell *et al.*, 2008a). For example, during training, Greek coaches from a variety of team and individual sports discussed that if the facilities or resources for training were not appropriate (e.g., too small or the correct equipment not being available), then this was a stressor (Chroni *et al.*, 2013). Therefore, it seems important that coaches are provided with additional support, such as instrumental support from the organization and or other coaches, to cope and buffer against the negative effects of stressors. Developing on the current social support literature, one of the coaches in this study illustrated that the need for social support is often sought in peaks and troughs. Whilst this was only highlighted by one coach, it partially supports the literature that social support is multidimensional and time-sensitive (Hassell *et al.*, 2010). This, alongside the general social support literature (Holt & Hoar, 2006), sheds light on the need for longitudinal research to better understand social support over a period of time.

As with any research project, this study is not without strengths and limitations. Starting with the strengths, the sampling strategy that was employed is one such strength. The sample included male and female coaches who were purposefully selected from a range of team and individual sports and coaching

levels. In doing so, the current work extends the wealth of published coaching literature that has recruited HPCs by providing insight into the experiences of coaches working at various performance contexts (e.g., level one). Research of this type would be useful to understand coaches' social support experiences across different performance contexts so that appropriate and effective support can be provided by the organization and or NGB at each context (e.g., level two specific coach education on social support). Furthermore, the innovative technique of representing the data (i.e., ego-network diagrams) illuminates the structure of the coaches' social networks. This provides an aerial view of the network structures. Moving on to the limitations of the study, the data were collected via a single interview, which means that the data reflects the coaches' discussions at one time point and therefore, may not fully represent the multidimensional nature of social support (Hassell *et al.*, 2010). In addition, the sample of this study were all white British. This omits coaches' experiences from diverse cultural backgrounds. This is important because different cultures may place higher values on different relationships (e.g., with family). It is also important to acknowledge the potential limitation of using a heterogeneous sample of team and individual sports. Future studies may wish to employ longitudinal methods (e.g., daily diaries or multiple interviews) whereby coaches can recount or record when, why, and what they use social support resources on a daily basis (see e.g., Didymus & Fletcher, 2012, 2014; Levy *et al.*, 2009) and whether the use of social support resources changes over time. Future research is also recommended with coaches from different cultural and ethnic backgrounds as cultures may place emphasis and values on different relationships (e.g., with family). As a result, coaches from diverse cultures and backgrounds may require different social support from their social networks and NGBs.

The results from this chapter also have applied implications. Not all coaches seem to be aware of the importance of social support and so NGBs should educate coaches on the usefulness of social support and how to build effective social networks through coaching qualifications and CPD events. Particular focus should be shed on relationships with friends that provide coaches with appropriate social support resources. In addition, the results provide practitioners working with coaches a better understanding of the situations when coaches require social support (e.g., during coaching qualifications) and provide more effective supportive resources (e.g., information about the coaching qualification) during these times. A further recommendation for practitioners based on these findings is to acknowledge the differences in coaches' social networks and to design individualized approaches, such as conducting one-to-one meetings that reflect the idiosyncratic nature of social support.

3.5. Chapter Reflections

After completing the systematic review and throughout the planning stages of this chapter, discussions were had with my supervisory team on defining social support. As discussed in chapter one, previous literature has found it difficult to conceptualize social support (e.g., Cobb, 1976; Holt & Hoar, 2006; Sheridan *et al.*, 2014). This makes it complicated for researchers, such as myself, to select an appropriate definition to use when conducting research. This has important connotations as the classification of social support informed the data collection and analysis techniques used throughout the thesis. After further reading (e.g., Heaney & Israel, 2008; Thoits, 1995; Uchino, 2009) and numerous discussions during supervisory meetings, it was agreed that social support would be characterized to encompass structure, resources, and functions (Cohen & Wills, 1985; see also Cohen

et al., 2000; Rees & Hardy, 2004). Exploring each section of this conceptualization provides extensive information on the network members in coaches social networks as well as the types of social support resources that they provide and the perception about whether the network and resources available to the coach are satisfactory.

To explore the social support structures of sports coaches, semi-structured interviews and SNA were used. The first time that I had conducted interviews for the purpose of research was during the data collection phase of this chapter. As a result of this and in line with the set research quality criteria, I was keen to reflect on the interview experiences by asking myself questions such as, was I talking too much? And does the interviewee feel comfortable answering the questions? A reflexive journal was configured in a Microsoft® Word® document to archive the thoughts about each interview (see Appendix N), as recommended by the literature (Berger, 2015). An area that I frequently reported in the diary was note taking. It was considered how taking notes was often deterring my attention away from the interviewees and adding little additional information at the analysis stage. Similar observations have been reported in the literature (Doody, & Noonan, 2013; Halcomb & Davidson, 2006). From this, a decision was made to stop taking notes during interviews and, as a result, I perceived that my questioning and probing during interviews improved. The reflexive journal also included using SNA and sociograms to collect data on coaches' social network structures. I had completed no previous training on SNA and therefore, developing an understanding of how to conduct SNA was established during the research process with an important practice being the pilot study. Furthermore, using the NodeXL data analysis software to create the network diagrams required numerous trial and error attempts before concluding on the final presentation for this thesis. Overall, maintaining a reflective log during the

research process helped to develop my interview technique and enhance my skills as a qualitative researcher.

3.6. Chapter Summary

The purpose of this chapter was to qualitatively explore male and female coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. The chapter advances the current social support literature highlighting that coaches perceived social support as the network of people around them who were there when support was needed. More specifically this support came in the form of the four social support resources: appraisal, emotional, informational, and or instrumental. Examples include coaches venting about a poor training session as emotional support, and or receiving ideas for team selection as informational support. The novel data collection technique of SNA was employed to provide data on the structure of coaches' social networks. The chapter demonstrated that coaches' social networks includes peers, friends, family, and miscellaneous (e.g., pet). Despite peers being cited more than the other populations, the ego-network diagrams and interviews showed that friends were the most influential source of support for coaches. This is important to understand the different avenues of social support available to coaches.

This chapter highlights that practitioners, researchers, and NGBs should work together to provide various options of social support to coaches. For instance, NGBs and practitioners should use coach education programs and CPD events to educate coaches on the types of social support resources that can be used to cope with specific stressors. This chapter contributes new insights in the sports coaching

literature by providing sports coaches' experiences and perceptions of social support. Of particular importance is the insight into coaches' social network structures that have not been previously explored. The results and future directions highlighted by this chapter helped to inform the purpose of the following chapter. Chapter four develops on from the current chapter by and advances scientific knowledge by longitudinally exploring the social support resources offered to coaches by the social network members identified in this study. Research of this nature also provides unique understanding on whether coaches social support resources change or remain stable across three different periods in time over a six-week period.

Sports Coaches Social Support Resources and Perceptions of Social Support and Stressors

This chapter builds on the previous chapter that focuses on coaches' social networks and reports cross-sectional data on social support resources, and perceptions of social support by exploring male and female coaches social support resources that are provided by the social network using a longitudinal research design. This is important to understand the types of support that are offered to coaches and how this can enhance their performance (e.g., advice on training drills). This chapter will also explore coaches perceptions of social support using interviewee-aided photo-elicitation, and following the results from the systematic review that highlight the potential coping effects of social support on stressors, this chapter will also offer insight into coaches perceived effects of social support to cope with stressors. The main focus of this chapter is to explore coaches' social support resources over a six-week period. Theoretically, this research will provide further understanding in the social support literature on whether the social support conceptualization provided in chapter one, that incorporates social support resources (appraisal, emotional, informational, and instrumental; Heaney & Israel, 2008), can be used with coaches. In addition, it will advance the knowledge provided in chapter three by exploring the types of resources that coaches use over an extended period of time. With reference to applied implications of this study, it advances the sports coaching literature by identifying the social support resources needed by coaches and inform future coaching interventions. For example, the results of this chapter will allow practitioners and NGBs to design more efficient social support interventions

(e.g., coaching roundtable discussions) suitable to coaches needs that improves performance and PWB.

This chapter starts by offering a review of the relevant sports coaching and social support resources literature before reporting the explicit methods used during this chapter. A longitudinal design was used to explore coaches' social support resources across three different time points. To study coaches' perceptions of their social networks and themselves within the network during time points one and two, this chapter used interview-aided photo-elicitation. During the third time point, the perceived effects of social support to cope with stressors was investigated using a semi-structured interview. Next, the results are highlighted and discussed in relation to previous research. To conclude, future research directions and implications are identified and a conclusion and summary of the chapter is offered.

4.1. Review of Relevant Literature

The last decade has seen a growth in research with sports coaches by way of exploring education (Vinson, Christian, Jones, Williams, & Peters, 2016), equality (Norman & Rankin-Wright, 2016), stressors (Dixon & Turner, 2018), coping (Didymus, 2016), and well-being (Bentzen *et al.*, 2016) among this population. To elaborate on the stressors and coping literature (e.g., Durand-Bush *et al.*, 2012; Stynes, Pink, & Aumand, 2017; Thelwell *et al.*, 2008a; see also chapter one), the research in this area has provided cross-sectional data that highlights coaches encounter a variety of different stressors, in particular those relating to organization and performance. Importantly, stressors can have negative implications for coaches in terms of their personal lives and relationships (Didymus, 2016). This is significant because coaches frequently use their relationships in the form of social support to

cope with stressors (Knights & Ruddock-Hudson, 2016; Olusoga *et al.*, 2010). For example, six male and four female head coaches from United States of America highlighted social support as a way of controlling emotions when experiencing stressors (Frey, 2007). Having friends who are not coaches, allowed the individuals to switch off from coaching and be ‘themselves’. Surrounding themselves with friends who were also coaches, meant that their social network could relate more to coaching specific stressors (e.g., athlete misbehavior) and provide emotional support (e.g., a listening ear).

Chapter three of this thesis provided novel insight into coaches’ social networks using visual diagrams. The chapter demonstrated that coaches turn to peers (coaches and colleagues), family, friends, and miscellaneous (e.g., internet) for social support resources. Interestingly, it found that whilst sport coaches frequently turn to peers for support, the most influential support actually came from friends. The previous literature exploring social support with coaches has been predominantly cross-sectional (e.g., Didymus, 2016; Knights & Ruddock-Hudson, 2016; Olusoga *et al.*, 2010). Hence, the multidimensional nature of social support is not fully explored. For example, different types of social support resources may be used by coaches to deal with different stressors (Rees & Hardy, 2000). Therefore, understanding social support resources over time can help to identify the types of support coaches use during different situations and provide knowledge on whether multiple social support resources are used to cope with stressors.

The effects of social support resources on stressors has been frequently cited as either main- or stress-buffering (Cohen & Wills, 1985; Lakey & Orehek, 2011; Wheaton, 1985; see also chapter one for more information). Research with athletes

has predominantly used cross-sectional, quantitative methodologies and found significant support for both the main- and stress-buffering effects of social support resources upon performance (Rees & Hardy, 2004, Rees *et al.*, 2007). Collectively, this research has found that increased social support and the matching of specific social support resources to cope with stressors, provided both main- and stress-buffering effects. This has potential important connotations because understanding the social support resources and its effects on stressors can help coaches to maintain their personal lives and relationships which will enhance their PWB.

A novel data collection technique that can be used to capture individual's perceptions of social support is photo-elicitation (Richard & Lahman, 2015; Van Auken *et al.*, 2010). Interviewee-driven photo-elicitation is a technique that involves the interviewees choosing images based on the aims of the interview (Phoenix, 2010; see also chapter two). Photo-elicitation in social sciences is seldom used despite the reported advantages (Van Auken *et al.*, 2010) that include having the ability to gather complex and layered meanings in a format that can produce more in-depth interviews, increasing interviewee led dialogue (Phoenix, 2010), and facilitating rapport building (Bates *et al.*, 2017). This data collection technique has received limited use with athletes (e.g., Strachan & Davies, 2015) and to my knowledge has not been previously used with coaches. The capacity for interviewee-aided photo-elicitation to produce images from the coaches themselves and yield complex and layered perceptions, memories, and feelings of social support (Richard & Lahman, 2015), makes it an appropriate technique to provide unique insights into sports coaches' perceptions of social support.

Overall, the literature with coaches has highlighted the potential influence that social support can have on stressors and performance (Knights & Ruddock-Hudson, 2016; Lakey & Orehek, 2011; Thelwell *et al.*, 2010; see chapter one for more information). Frequently experiencing stressors can have negative implications on coaches' relationships with their social network (Didymus, 2016) and lead to burnout (McNeil *et al.*, 2017). This provides an opportunity to develop the current social support literature by exploring social support resources longitudinally with coaches that work in a frequently stressful and changing profession (Thelwell *et al.*, 2008a). This is particularly important due to the multidimensional nature of social support (Hassell *et al.*, 2010). Studying social support resources over an extended period of time with coaches is important to understand the types of support coaches use to cope with frequently changing stressors and therefore, reduce the likelihood of burnout. This knowledge can inform organizations (e.g., Connected Coaches, ICC, UK Coaching) on the development of coach education programs that includes educating coaches on using social support to cope with stressors and increase PWB. The chapters aims are three-fold, to advance scientific understanding by exploring male and female sports coaches social support resources over a six-week period, to investigate coaches' perceptions of social networks using a novel method, and to understand the perceived effects of social support resources on coaches' stressors. This aligns with the second and third aims of the PhD to examine social support resources of sports coaches and to gain an understanding of coaches perceived effects of social support on stressors from a variety of coaching contexts.

4.2. Methodology and Methods

4.2.1. Interviewees

Purposeful (Patton, 2002) and snowball sampling (Robinson, 2014) were used to recruit an adequate sample size in order to ensure representativeness in relation to the research question (Coyne, 1997). Overall, 15 coaches were contacted via email and invited to participate in the study. Ten coaches (female=6, male=4; $M_{age}=35.2$, $SD=13.0$ years, $M_{experience}=13.5$, $SD=9.7$ years) volunteered to take part in the study (see Table 14). Interviewees were coaching part-time as either a head ($n=8$) or assistant ($n=2$) coach at the start of data collection. During the data collection process, one coach moved to an older age group within their club and therefore changed from head to assistant coach. Interviewees represented either a team ($n=2$, soccer, Gaelic football) or individual sport ($n=5$, disability tennis, real tennis, tennis, squash, and triathlon) in a youth ($n=4$) or adult ($n=6$) context. The performance context of coaches ranged from level one to five in their respective sports ($M_{level}=3.0$, $SD=1.1$) and were employed by a sports club or organization ($n=4$) or coached on a volunteer basis ($n=6$). Five of the coaches in this sample were working closely with another coach at the time of data collection.

Table 14

Chapter Four Interviewee Characteristics

Interviewee Pseudonym	Age (years)	Sport	Context	Experience (years)	Level	Employed / volunteer
Andy	52	Soccer	Youth	12	4	Employed
Chloe	26	RealTennis	Adult	8	1	Volunteer
Ellen	24	Soccer	Youth	8	2	Volunteer
Ethan	26	Gaelic Football	Adult	10	2	Volunteer
John	18	Soccer	Youth	4	3	Employed
Kim	32	Squash	Adolescence	15	3	Volunteer
Lily	43	Disability Tennis	Adult	22	4	Volunteer
Natalie	50	Triathlon	Adult	7	3	Volunteer
Rosy	25	Soccer	Youth	10	3	Employed
Scott	56	Tennis	Adolescence	39	5	Employed

4.2.2. Study Design

The current study utilizes multiple methods to explore coaches' social support resources, perceptions of social support, and perceived effects of social support to cope with stressors. To answer the main aim of this chapter, a longitudinal study design was used to explore coaches' changing experiences of social support resources across three interviews, each three weeks apart (i.e., a six-week data collection period with each coach). The number of interviews conducted during and the length of a longitudinal study depends on the research problem posed (Hermanowicz, 2013). The length and number of interviews for this study was chosen as it was a sufficient time to examine the relevant phenomena (Hermanowicz, 2013), such as social support, whilst also acknowledging the time constrictions of completing a PhD. The longitudinal approach is appropriate for this study as it aligns

with the multidimensional characteristic of social support (Hassell *et al.*, 2010) by providing data on how social support may change or remain stable over time.

To answer the secondary aim of this chapter, the first two interviews also investigated coaches' perceptions of their social network and themselves within the network using interviewee-aided photo-elicitation (Bates *et al.*, 2017). Researchers have stressed the multidimensional qualities of images, which can represent experiences, social domains, and physical settings (Harper, 2002; Glaw *et al.*, 2017). Moreover, interviewee-aided photo-elicitation aligns with the social constructionism paradigm that underpins this thesis by having the ability to shift control from the researcher to the interviewee by giving the interviewee freedom to photograph their own images and take control of the direction of the interview (Phoenix, 2010). Finally, in the third interview with each coach, their perceptions of social support to cope with stressors were examined. Concentrating on social support and stressors in the final round of interview ensured that this topic was discussed in-depth. The rationale for focusing on these three specific areas was to meet the various aims of the study that previous research has not explored through representation of social domains and physical settings (Glaw *et al.*, 2017).

4.2.3. Data Collection

4.2.3.1. Interview Guide. A semi-structured interview guide was developed specifically for this study (see Appendix J) using previous literature on social support with coaches (see chapter three; Knights & Ruddock-Hudson, 2016) and athletes (Rees & Hardy, 2000). The interview questions for the first round of interviews were divided into three sections. The first section consisted of open introductory questions (e.g., "How did you get into coaching?") that were designed

to understand the coach's background and build rapport with the interviewee.

Section two entailed open questions about coaches' experiences of social support resources (e.g., "What are your previous experiences of social support as a coach?") with additional probes (e.g., "Can you tell me more about that?") to expand on an area or elicit further understanding. Section three of the interview guide focused on coaches' perceptions of social support (e.g., "What perceptions do you have for your social network?" and "How do you see yourself within your social network?") and on setting up the photo-elicitation task. Section three relates to the social support function of perceived support offered in chapter one (an individual's perceptions concerning the availability and access of their social network and the satisfaction with the social support).

At the end of the first interview, each coach was invited to generate images for the specific purposes of the research. Interviewees were encouraged to take up to 12 images based on the following criteria; up to four images of how they perceive their social network, up to four images on how they perceive themselves within their network, and up to four images on anything else that they thought was significant about social support. The rationale of four images for each criterion was that similar guidelines had been used previously in other photo-elicitation research (e.g., Bates *et al.*, 2017) as it allowed for the coaches to provide sufficient, appropriate images relating to the research aims that was also palatable for the researcher. Photographs could be taken on their smartphones or other electronic devices, be live or historic, and or could be image sources and downloaded from the internet. The only restriction given to the interviewees was that there could be no pictures of other people's children. Pictures of their own children were allowed but it was emphasized that these would not be used in any reproduction of materials. It was explained to the

interviewees that they would be given an opportunity to discuss the images they had chosen in the second interview. Coaches were also given a task information sheet to remind them of the criteria for generating images, the restrictions, and my email address (see Appendix K). The email address was provided to interviewees to allow them to contact me regarding any queries about the photo-elicitation technique and to send the final selection of images in between interviews one and two so that they could be printed prior to the second interview.

The interview guide for the second time point followed a similar structure to the first round. The first two sections consisted of open introductory questions to understand any experiences since the previous interview (e.g., “tell me about what you have been up to since we last spoke”) and coaches social support experiences since the previous interview (e.g., “When have you used your social support since the last time we spoke?”). The third and final section of the interview was designed for the coaches to discuss the images from the photo-elicitation task (e.g., “Why did you take that picture?” and “What does this mean to you?”). The interview guide for the final round of interviews followed the same format as the previous time points. However, instead of photo-elicitation, the third section of the interview guide elicited discussions about social support and stressors through the use of open and closed questions (e.g., “Can you give me an example of when social support has helped when you have been stressed?”) The aim of this section was not to explicitly test the main- and buffering-effect models, but to explore the perceived effects of social support to cope with stressors, which were consequently deductively analyzed into the main- and stress-buffering models. Questions pertaining to social support and stressors were asked across all three rounds of interviews (e.g., “Has social support helped when you were stressed? If so, when? If not, why not?”), however the

previous interviews focused predominantly on the other areas being explored (coaches' social support resources and interviewee-aided photo-elicitation).

The structure of the interview guides was followed but the flexible nature of semi-structured interviews also allowed discussions from previous interviews to be debated (Sparkes & Smith, 2014). All interviews were conducted face-to-face with the first round of interviews being conducted during August, September, and October 2017, followed by the second interview three weeks later (September, October, and November 2017). The final interviews were conducted in October, November, and December 2017. The interviews were transcribed verbatim and lasted between 33 and 110 minutes ($M_{length}=58.81$, $SD=14.44$ minutes).

4.2.4. Data Analysis

Each interview transcript was analyzed using an abductive approach to latent thematic analyses (Braun & Clarke, 2006). The six steps of thematic analysis (Braun & Clarke, 2013) outlined in chapter two were conducted using NVivo (QSR International Pty Ltd, 2016). In the latter stages of analysis deductive themes were created from the inductive themes. For example, when analyzing the inductive theme of coaches' perceived effects of social support to cope with stressors, it was clear that these could be grouped according to either the main-effects or stress-buffering models that have been discussed in other published literature (Cohen & Wills, 1985) without changing their meaning. The photographs themselves were not analyzed but the associated account that went alongside the pictures were analyzed using thematic analysis (Harper, 2002). Each interview was transcribed after the completion of the entire data collection period, analyzed, and input into universal lower- and higher-order themes. Once this had been completed, codes and themes were separated into

each time point to provide information received during each round of interviews.

4.3. Results

The results are divided into three sections: coaches' social support resources over a six-week period, coaches' perceptions of social networks, and the perceived effects of social support to cope with stressors. Within these sections, there are numerous subsections that provide an overview of what is being presented. The results provide quotes from the coaches that allows for their experiences and perceptions to be at the forefront of the chapter. Pseudonyms are used throughout the results section to protect the coach's identities and maintain confidentiality. The longitudinal element of the findings is portrayed by presenting interviewees quotes across the different interviews (e.g., 'in interview one [interviewee] discussed that... whereas in interview two...') Within the second subsection (i.e., that focused on coaches' perceptions of social support), photos are used to illustrate how coaches perceive their social network and themselves within it.

4.3.1. Coaches' Social Support Resources

This section focuses on the types of social support resources (appraisal, emotional, informational, and instrumental) that coaches used over the 6-week-period. Overall, I constructed 642 raw data codes were over the three time points (time point one=263, time point two=176, time point three=203) that focused on coaches' experiences of social support (see Tables 15, 16, and 17). Based on the abductive approach, I organized these data codes into 17 raw data themes before subsequently being organized into four lower-order themes that each represented a different type of social support resource that were discussed across three interviews: appraisal (e.g., encouragement), emotional (e.g., venting), informational (e.g.,

advice), and instrumental (e.g., sharing tasks).

Table 15

Coaches' Experiences of Social Support – Interview One

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Advice (10)	Informational (10)	Coaches' Experiences of Social Support (10)
Feedback (5)		
Ideas (8)		
Acceptance (3)	Appraisal (10)	
Affirmation (8)		
Confidence (2)		
Encouragement (7)		
Perspective (6)		
Reflection (4)		
Soundboard (8)	Emotional (8)	
Venting (6)		
Financial (2)	Instrumental (8)	
Home (3)		
Opportunities (4)		
Physical activity (3)		
Sharing tasks (4)		
Travel		

Note. Numbers in parentheses demonstrate frequency counts on the number of coaches reporting that theme. If no number is included then this was reported by only one coach. The same approach to data representation has been applied in Tables 16-20.

Table 16

Coaches' Experiences of Social Support – Interview Two

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Advice (10)		
Feedback (5)	Informational (10)	
Ideas (7)		
Acceptance (3)		
Affirmation (7)		
Confidence	Appraisal (10)	
Encouragement (3)		
Perspective (8)		Coaches' Experiences
Reflection (2)		of Social Support (10)
Soundboard (7)		
Vent (4)	Emotional (8)	
Distraction (5)		
Home (3)		
Opportunities (4)	Instrumental (8)	
Sharing tasks (2)		
Travel		

Table 17

Coaches' Experiences of Social Support – Interview Three

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Advice (9)		
Feedback (7)	Informational (10)	
Ideas (7)		
Affirmation (8)		
Confidence (4)		
Encouragement (2)	Appraisal (9)	
Perspective (4)		Coaches' Experiences of
Recognition (5)		Social Support (10)
Soundboard (9)		
Vent (8)	Emotional (10)	
Distraction (4)		
Home (9)		
Opportunities	Instrumental (10)	
Physical activity (2)		
Sharing tasks (4)		

4.3.1.1. Informational Support. This section included data from each of the ten coaches over the six weeks who described across all three interviews receiving support for advice (e.g., signing players), ideas (e.g., training drills), and feedback (e.g., improve coaching courses). All ten of the coaches discussed that they used social support to gain advice. For example, prior to the first interview, Andy had recently accepted a new manager's position at a soccer club in a different country and needed some advice:

This manager's job, I've never been a manager of a professional football club before. I have at semi-professional. So now I'm calling in favors from people to, you know, "what do you understand by it?" "What do you think we need to do?" "What's the first 60 days look like?"

Then during the third interview, Andy discussed how preparing for the new manager's position had progressed and that he was now looking for players to join him at his new club but required additional advice on this:

I'm always, always looking for advice . . . They will say you're always learning, but one of the biggest things about always learning is the advice that you take. Um, I'm going out to [country], a completely different FA structure . . . So, when you approach a player, it's completely different. So, you have to find out how, so how you would approach a player, how you sign a player. The contractual system is completely different in this country. So, yeah, I've had lots and lots of advice. I've asked for it. Um, uh, you know, I said, "What's the score in [country]?" And- and- and- So, yeah, I've had loads of information advice on the system in [country].

Coaches also cited informational support as important for gaining ideas for training. In interview one, Ellen discussed how she shared ideas with other coaches:

So, it's nice when you like- so I've got a guy that I do coach with who is really, really good . . . kind of giving each other ideas . . . there are a few more [coaches] there [at the club] that are the same. So, the ladies team coach is quite good at getting involved with those [discussions] and having ideas...

In the third interview, Ellen conversed that she now had a female coach that was observing her coaching and providing advice and ideas:

She's [coach] been doing it [observing] and recording it [me coaching] and sending it [recording] over so I can have a look through it [the video] . . . Um, but yeah, that was really helpful to just have someone like that there that I could walk up to and go "Oh, this isn't working, what do you think if I do this?"

4.3.2.2. *Appraisal Support.* In addition to informational support, coaches discussed appraisal social support resource across all three interview such as affirmation (e.g., that they are doing the right thing), perspective (e.g., different mindset), confidence (e.g., improving confidence), and encouragement (e.g., to progress). Additional themes were experienced across two interviews; acceptance (e.g., of coaching hours) and reflection (on coaching practices) with one theme only being cited during one round of interviews; recognition (e.g., coaching achievements). A prominent theme across all three rounds of interviews was affirmation. During the third interview, John discussed how comments from his coaching partner affirming that training had gone well made him feel supported:

Um, [coach], she usually texts me um sometimes you know, "Good session tonight!" or "Really happy with the session. So yeah, like, well done." So, she sometimes gives me that feedback, usually over text. Um, yeah, it's nice to hear, because she's obviously supporting me there...

Another finding across all three rounds of interviews was being offered a different perspective. Natalie discussed how talking to other coaches provided her with different perspectives to think about when coaching:

Um, but they [the other coaches] all come from slightly different backgrounds, coaching people at different levels, coaching different types of people, kids, all the people, high performance, and on every day or whatever. Um, and so you get all those different perspectives and so you get much richer conversations around the topic, and you can take on board different ideas and apply them to your own context.

A theme that only occurred during the third round of interviews was recognition. For example, between interviews two and three, Chloe received an award and discussed how the appraisal support in terms of recognition she received from her network made her think more positively about the award:

I got an award for the best performance over the season which was cool, but I didn't really think much of it, but actually, it was really nice coz I had a whole heap of people just being, you know, congratulating me and telling me how well I did. I was kind of like, "Oh, thanks", you know. That's quite nice to feel the pat on the back.

4.3.2.3. Emotional Support. Coaches also experienced emotional support over the six-week data collection period. Someone being a soundboard (e.g., listening about ideas) and venting (e.g., frustration at player behavior) were highlighted across all three rounds of interview. Coaches discussed having someone as a sounding board. John described in his first interview talking to his romantic partner and parents about coaching because they know him best:

Um, my girlfriend I think. Just someone to just to talk to about coaching. She [girlfriend] would understand because she knows me the best. So, I suppose my parents as well. They started nudging me on but they don't really know about football but they know about me and what I want to do and where I want to go.

Then during the second interview, John discussed how he would also frequently speak to a more experienced coach that he was close to: "I think the um [coach is] quite positive about both the reflecting and using each other as a bit of a sounding board a bit of a you know what do you think, what do you think?" Furthermore, venting was important for coaches. In between interviews one and two, Kim reluctantly applied for a promotion because she did not feel appreciated and described needing emotional support in the form of soundboards and venting to get the frustrations off of her chest:

Yes, so I just had to, you know, just to like . . . I spoke to you about, I need to get it out in the open, I need to get it off of my chest. Otherwise, it just bubbles over. But it's just made me a little bit flat and a little bit demotivated and stuff.

And then prior to the third interview, Kim needed further emotional support from her network regarding her job and an application to attend a coaching course:

Um, I had emotional support with getting on to the level five [coaching course]. So initially it's been squashed and we're not allowed to do it. I'm not allowed to do it. I don't know why, um. Then like they went on here [online], and then the dates changed actually for the level five, they put it back. There weren't enough people to . . . Cause it's only once every two

years, it's like degree like um, I went back to the head of sports with a proposal again, and just said, "I just want some time, and then you know, time to do it. And I've got the funds" sorta thing. Uh, but that was through support network really. I obviously went back and then a couple of the other coaches were doing it [the level five], and I was like, "Why do they get treated differently, and um, and why is it like the . . . I'm coaching just as much as a lot of them guys are, and how come they can do it and I can't?" sort of thing. And they were like you know, "Put in a bid, write a bid, write something, write a proposal." Um, financially I was gonna get support from . . . it weren't gonna be a lot but people wanted me to do it. The support network were gonna chip in cause it was gonna be like two-three grand.

This quote suggests that coaches may use more than one type of support resource to manage the same stressor (e.g., emotional support to vent and instrumental support with finances).

4.3.2.4. Instrumental Support. To a lesser extent, coaches experienced instrumental support. Over the three interviews this included sharing tasks (e.g., administration), support from home (e.g., food shopping), and creating opportunities (e.g., to observe). Exercise (e.g., gym), distraction (e.g., going for a meal), and travel (borrowing a car) were cited during two interviews, and financial (e.g., funding) support was only mentioned in the first round of interviews. In his first interview, Andy talked about the helpfulness he experienced from a colleague that recognized when he needed support and took on some of his tasks:

...they [social network] can recognize the fact that I'm at my wits end here and actually say, "Leave it with me, I'll sort it for ya." [Colleague] is brilliant at that by the way. If you ever say, "[Colleague], the world is getting

on my shoulders.” She will just say “Take it off, leave it, I’ll sort it.”

Andy did not mention instrumental support in the second interview but during the third interview discussed that during the three weeks in between interviews two and three, he had been relying on family support to complete tasks at home because he was busy with his coaching:

...certainly, over the last two or three weeks, I haven’t needed much support apart from family support, you know. I’m painting, please get me ironing done, me washing done, me cooking done. You know, when I get home [from coaching] I’m gonna have a shower so you know, don’t expect me to go and take the dog for a walk or, you know, so I think because you’re so busy with whatever, your only social network is your family really and the immediate family.

The instrumental support resources coaches received from people at home was important across all three interviews. Without that support, some of the coaches may not have been able to continue coaching. For example, during the first interview, Chloe talked about the support that family provided by looking after her child when she was coaching:

...when you’re playing, or coaching, or marking, or, you know, whatever it may be. Someone else is having to, um, pick up the kid from school or-or, um, you know, tomorrow, mom has her [child] when I coach, 16:00 to 18:00.

In some cases, the instrumental support were small tasks, but just as important, as described by Ethan in his first interview: “...might be my turn to buy milk, but yet somebody has done that because they know if I had time, if I had the intentions, I would have done it. But it’s just because it’s, just little things...” This

quote highlights that social support does not need always need to be huge gestures and can come in different forms.

4.3.2. Coaches' Perceptions of Social Networks

This section highlights coaches' perceptions of their social network and themselves within the social network. This higher-order theme contains a total of 267 raw data codes (time point one=58, time point two=209), 20 raw data themes, and two lower-order themes, which I constructed predominantly from the interview data that I collected at time points one and two (see Table 18): perceptions of social network (e.g., honest) and perceptions of self (e.g., central). Images from interviewee-aided photo-elicitation are also provided to provide visual representations of coaches' perceptions.

Table 18

Coaches' Perceptions of Social Support from Interviews One and Two

Raw Data Themes		Lower-Order Themes	Higher-Order Theme
Interview One	Interview Two		
Challenging	-	Perceptions of Social Network (10)	Coaches' Perceptions of Social Support (10)
Consistent	Consistent (5)		
Disclosure (2)	Disclosure		
-	Energizing (2)		
Honest (4)	Honest (6)		
Listening (7)	Listening		
-	Protective (2)		
Understanding (4)	Understanding (5)		
-	Center (2)		
-	Disclosure		
Equal	Equal (2)		
Honest	Honest (2)	Perceptions of Self within Social Network (10)	
Positive	-		
Reciprocal (4)	Reciprocal (6)		
-	Respect		
Supportive (4)	Supportive (2)		
Understanding (2)	Understanding		
-	Visible (2)		

4.3.1.1. Perceptions of Social Network. This lower-order theme explored the perceptions that coaches had of their network. Being consistent (e.g., repeated messages), energizing (e.g., refreshing), honest (e.g., feedback), protecting (e.g., against stressors), and understanding (e.g., of the demands of coaching) were discussed by coaches during interviews one and two. Challenging the coaches (e.g., through discussions) was mentioned only during the first round of interviews. Images from the second time point are also used in this subsection to support certain themes. One of the main reoccurring themes across the first and second time points was the perception that the social networks were understanding of them as a person and with the demands of coaching. This was typified by Kim during her second interview who discussed the different ways that her romantic partner was understanding and the links to instrumental support of taking her away from coaching and being able to switch off from squash:

He [romantic partner] trains and plays [squash] about five times a week, he's a decent player. So, he's good because he's got that understanding [of squash]. He knows what it's about, he knows how passionate I am about it, he understands weekend work. He understands what relationships I need to build with other people, which I have had trouble with in the past with partners not grasping, you know, because it's a lot of weekend work. I am building strong relationships with my athletes and the people that I work with and he's just got a really good understanding of it because he's in it.

Yet, whilst coaches wanted their networks to be understanding, they also wanted them to be honest. During the first interview, Andy discussed how he wanted people to be honest about whether they could offer him social support:

I want people to be honest. Uh, if you can help me, help me. If you're not gonna help me, just tell me straight away, you know? I'm quite, quite happy. Won't make me dislike you, you know? I won't think, you know, "Don't like you because you won't help me." When people say, "I can't. I'm busy." I'd rather you say that than "Yeah, of course I will." And then I have to chase people . . . I'd rather you just turn around straight away and be honest with me and say, "I can't. I ain't got time." You know, flower it up a little bit. Flower it up a little bit but yeah. But ultimately, you know, I'd rather honesty. That's my expectations of anybody, you know.

Honesty included the social network not being afraid to challenge the coaches. The following quote and Figure 16, both from Ethan, highlighted his perceptions that he wanted to be regularly challenged but also felt that he will always come out on top because of the support:

So regardless, doesn't matter how big it is, how firm it is, how much damage it can cause me, I'm not really rattled because I know I have all of these support structures in place and I'm always going to come out on top. Regardless of the original anticipation it might necessarily seem that at that moment in time that seal is not thinking they're gonna come out the top one. The same with me and my support structures that I know that if I reach out to individuals, I am fortunate enough that I see myself coming out on top.



Figure 16. “I’m always going to come out on top.” Photo from Ethan.

Coaches also cited consistency as an expectation of their network. One of these was Chloe who took a picture of a court (Figure 17) and explained how this represented consistency for her because the sport she was involved in was small and so she saw the majority of her social network at the different courts:

I liked the court idea. Um, in terms of my network because like you can go . . . you’re going to all go in courts all round the world. You’re traveling to like completely different places, amazing places and yet because it is a small sport, you’re like you’re home you know? There’s always people who are basically that are there to greet you, “welcome back”, “how have you been?” you know, know a lot about you um, and I thought like the court best kind of explains what I’m what I mean there. In that the court is your support network because that just takes you to lots of different places, but you’re within you . . . It’s like you’re within your comfort zone.



Figure 17. “I liked the court idea. Um, in terms of my network.” Photo from Chloe.

This was echoed by Andy who mentioned that having consistency in his social network meant that it is easier for him to find the most appropriate support. He explained this in relation to Where’s Wally and trying to find Wally or the right support (Figure 18):

...there’s thousands of people in those pictures . . . There’s a couple that are pretty similar to Where’s Wally, but actually aren’t Where’s Wally. You’re always looking for that ‘Where’s Wally’ but if that person is hiding and you can’t find him, you’re gonna go to something that looks like him and not get the answer that you actually want. So, I want ‘Where’s Wally.’ That’s the person, the strategic person at the top of my pyramid. He’s the person I want, but I can’t find him. He’s not available, he don’t answer his phone, he don’t answer his texts within five minutes the world is about to end, so I’m likely to go to something that looks like and not the genuine article and maybe take advice that’s not what I wanted.

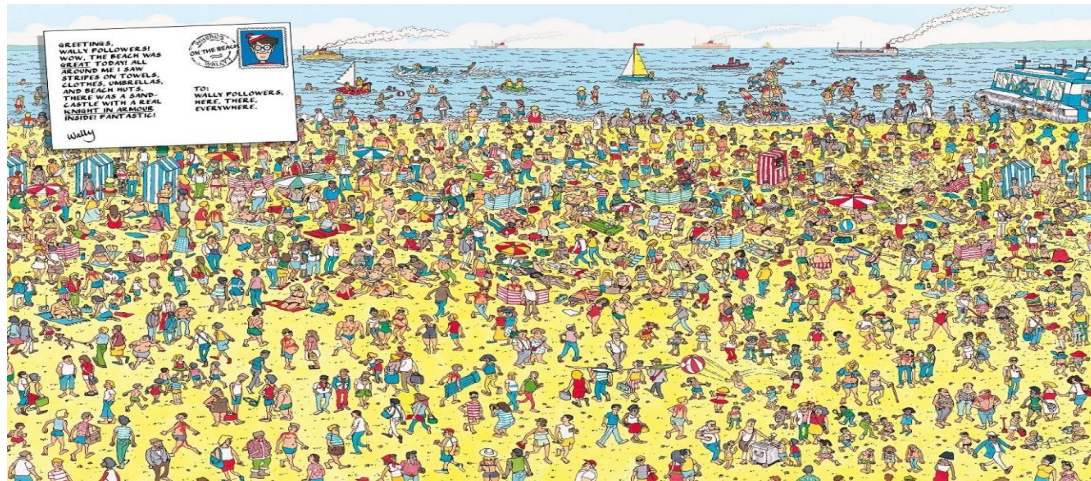


Figure 18. “You’re always looking for that Where’s Wally” Photo from Andy.

Finally, coaches discussed the perceived energizing effects of their social network. During the second interview, Rosy provided a picture of her phone charger (Figure 19) and explained:

So, this, this is obviously a charger. So, I used this to say how I use [my] support network. I see my support network as sometimes it’s to recharge. So, like, maybe in like extreme circumstances but sometimes, you know what I mean, like something’s gone wrong or you’re just so stressed . . . So, like sometimes like in extreme circumstances you just need to not even talk about football or just go to the pub or go to uh, I don’t know or watch a bit of TV at home or just have dinner and talk about something else entirely. Um, so yeah, I kind of used that as recharging.



Figure 19. “I see my support network as sometimes it’s to recharge.” Photo from Rosy.

4.3.1.2. Perceptions of Self within Social Network. This section explores how coaches saw themselves within their network across interviews one and two such as providing a reciprocal relationship (e.g., supporting each other), understanding (e.g., of network members feelings), honest (e.g., feedback), equal (e.g., on the same level), and supportive (e.g., there for their network). Other themes were mentioned only during one round of interviews such as being center of the network (e.g., the main person), disclosure (e.g., keeping conversations private), positive (e.g., encouraging), more visible (e.g., available to the individual), and respectful (e.g., respecting the problems).

During the second round of interviews, coaches perceived themselves as central to their networks. A number of coaches, such as John, discussed support in terms of a pyramid (see Figure 20): “So I’m in the middle somewhere [of the pyramid], people below me giving that foundation, a strong base, and there’s the people in above where I want to be but also, they support me in the same pyramid.”



Figure 20. “I imagine the pyramid.” Photo from John.

Rosy provided a different perspective by identifying her network as more of a spider web (see Figure 21) saying that:

So, there’s me in the middle, the spider- um . . . But like, so there are the closest people, are the people I use most often then obviously the closest in the web, so they’re like the people I go to most often because they’re the easiest to reach are the people...



Figure 21. “So, there’s me in the middle, the spider.” Photo from Rosy.

Whilst coaches discussed being in the center of their social networks, they were also keen to acknowledge that importance of them being supportive to their network members. Across the first two interviews, coaches reiterated that they

perceived themselves to be supportive as shown by Natalie in the first interview:

“...I think I’m quite, I’m quite giving, I’m quite happy to support others. Um, I try to listen and do those things, prioritize what’s right for them and I try to make time for people when they need support” and reiterated again in her second interview: “Um, and doing the best you can do for the people you’re working with.” Coaches perceived that their network being supportive and themselves being supportive, provided a reciprocal relationship. John represented this with a picture of a road sign with two arrows (see Figure 22) and explained:

...that’s the teamwork, the friends, it’s two-way. And if you link that to the sort of pyramid, if they pull out a lot, then that network, the pyramid, will start to crumble and it’s not going to work.



Figure 22. “Um, that’s the teamwork, the friends, it’s two-way.” Photo from John.

Finally, Chloe took a picture of her desk (Figure 23), highlighting the level of organization and relating it to how she perceived herself in her network:

I thought this was a good one . . . I’m super organized, um, and when I come in and that desk is like not clean, not everything in like their purposeful position, I just, I don’t know what . . . but for my playing and my

coaching and my projects around it, you can't afford to not to be organized and so how I see myself [in my social network] is like the organized one.



Figure 23. "...this is just a photo of our desk..." Photo from Chloe.

4.3.3. Perceived Effects of Social Support to Cope with Stressors

This section presents results based on coaches perceived effects of social support to cope with stressors from the third round of interviews only (see Tables 19 and 20). This higher-order theme contains a total of 81 raw data codes, seven raw data themes, and two lower-order themes: main-effects and stress-buffering-effects.

Table 19

Coaches Perceived Main-Effects of Social Support on Stressors

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Talking (8) Venting (6)	Emotional Support (9)	
Advice during an event (5) Ideas	Informational Support (5)	Main-Effect (9)
Receiving Information at an event		
Borrowing a Car Hiring a cleaner Making dinner Sharing Tasks (5)	Instrumental Support (6)	

4.3.3.1 Main-Effects of Social Support. During the third time point, nine coaches discussed the main-effects of social support on stressors (see Table 19). Coaches commonly turned to emotional support to reduce the negative effects of stressors. For instance, Chloe talked about how emotional support by venting when she was stressed provided an outlet:

God, just even having a rant to someone, de-stress you know, really helps de-stress. Um, whether it's about my match, whether it's about, uh, you know, could be a coaching session or potentially, like planning for a coaching session-which can sometimes be stressful, um, definitely having like even just someone as your soundboard, just to go back to.

Instrumental support also had a direct influence on coaches' experiences of stressors. An example is from John who mentioned that if his coaching partner sees that he is stressed, she will often take up more tasks to reduce his workload and, hence, the volume of stressors:

I'm stressed all the time, I mean . . . No. Um, has it supported me when I'm stressed? Yeah yeah yeah, they have. They've [social network] sort of taken a bit astray, so like, [coach] might have taken like some of the responsibilities off me. She might have coached rather than me and I just sort of sit back and watch a little bit.

Furthermore, coaches discussed the effects of informational support on stressors. For instance, Kim discussed how she required all the relevant information when at an event or competition, otherwise she would get stressed:

Um, informational support. I think it, uh, getting it, receiving information for me really does . . . I think it's when I'm in the dark that I get stressed. So anytime with feedback as long as I can get [information and feedback] then it helps with my stress levels.

Table 20

Coaches Perceived Buffering-Effects of Social Support on Stressors

Raw Data Themes	Lower-Order Themes	Higher-Order Theme
Encouragement Perspective Reassurance Recognition (3)	Appraisal Support (9)	
Talking (5) Venting	Emotional Support (6)	
Advice prior to an event (4) Feedback (2) Receiving information prior to an event	Informational Support (4)	Stress-Buffering-Effect (9)
Parents looking after the children	Instrumental Support	

4.3.3.2. Stress-Buffering-Effect. In total, nine coaches discussed the perceived buffering effects of social support on stress (see Table 20). Coaches perceived emotional support to have stress-buffering-effects. The ability to talk about things and get them ‘off their chest’ prior to a stressor providing negative consequence protected them. Chloe provided an example of this: “I’d say it doesn’t even need to be stressing you out for having spoken about it. It’s like a subconscious, you’ll be less stressed in the future...” Rosy discussed getting informational support, such as advice prior to an event as a preventative measure of stressors:

It’s like a preventative measure up than a cure if that makes sense, so yeah things like that. Um, and again like talking to [coach] about like the match days and stuff I didn’t even start to worry about that cause we already have a plan...

Finally, some of the coaches, such as Chloe, briefly touched on how instrumental support can reduce the effects of stressors:

It [instrumental support] probably like makes things less stressful. I don’t like something I don’t have to think about. Yeah, before you can get it and go, “Oh my God what am I going to do?” you know tomorrow night we’ll be in a final but my mums got the little one, so I can still work in the home, you know. If she was away and I was thinking about it, then that would be a real stress to me...

4.4. Discussion

The purpose of this study was to longitudinally explore male and female sports coaches social support resources over a six-week period, investigate coaches’ perceptions of social networks using a novel method, and to understand the

perceived effects of social support resources to cope with stressors. The findings highlight that over a six-week period, coaches commonly use informational support for advice, ideas, and feedback on training session, new job roles, and player development. Results also suggest that coaches may turn to more than one social support resource to cope with the same stressor. With reference to how coaches perceived themselves in their social network, coaches saw themselves as central whilst also providing reciprocal support to their social network. Furthermore, coaches perceived their social network as consistent (e.g., repeated messages), honest (e.g., about availability), understanding (e.g., of the situation), and challenging (e.g., push them). Coaches also discussed how their social network were protective of stressors and that social support resources may have an effect on an individual regardless of the magnitude of support offered. Interviewees perceived that social support resources had stress-buffering and main-effects on stressors.

With reference to coaches' experiences of social support resources, the findings highlight that coaches experienced all four types (appraisal, emotional, informational, and instrumental) of resources over the six-week period. The results of this study illuminate that coaches frequently use informational support to cope with stressors. For example, sharing training drill ideas was important for the interviewees to develop as a coach. Other research (Hassell *et al.*, 2010; Katagami & Tsuchiya, 2017; Kristiansen & Roberts, 2010) has found that informational support from coaches is important for athletes to decrease the negative consequences of stressors and feel more confident in their performance. This highlights the possible implications of social support resources on the PWB and performance of coaches. Interestingly, coaches in this chapter provided new insight by suggesting that they may use more than one type of social support resource to cope with the same

stressor. For example, when applying for a coaching qualification, coaches cited using informational and instrumental support. The use of different types of supportive resources to cope with the same problem can aid in the effectiveness of coping and are vital characteristics of the person's social network (Levy *et al.*, 2009; Rees & Hardy, 2000). It seems that coaches use social support resources that they perceive are the most appropriate to cope with a specific stressor.

The use of interviewee-aided photo-elicitation in this chapter provided novel data on coaches' perceptions of themselves being central to their social network (e.g., images of pyramids and spiders webs) whilst also delivering reciprocal support to their network members (e.g., image of a two-way sign). Illuminating the novel data collected, coaches suggested that honesty is important with their social network to create reciprocal relationships and an effective working environment (Olusoga *et al.*, 2010). The implication of this is that, if coaches perceive their social networks are honest and reciprocal, this can create a perceived safer environment for them to perform and consequently, increase PWB. Expanding on reciprocal relationships and feeling connected, research using photo-elicitation with athletes has highlighted the importance of feeling connected with their social network (Weiss *et al.*, 2017). This helped to reduce the feelings of isolation and encounter more positive sport experiences. If coaches have more positive experiences, especially female coaches who often encounter additional barriers to coaching (e.g., having to prove oneself as a capable coach; Kilty, 2006), this can increase their intentions to stay and develop in coaching (Sagas *et al.*, 2006).

Feeling connected and satisfied with the social network also links into the social support function of perceived support (Uchino, 2009). The results from this chapter provides new insight into what coaches perceive to be important with regards

to the satisfaction with their social network and highlighted that the more satisfied coaches are with their support, the increased potential effects this can have on their PWB (Uchino, 2009). Research has highlighted the significant effects that perceived support can have on increasing an individual's PWB (Gottlieb & Bergen, 2010; Rees *et al.*, 2007). It is important to understand what coaches perceive as important with regards to their network and therefore provide them with the most effective social support resources for that stressor so that they are satisfied with the support offered by their network. Research of this nature with female coaches, particularly of team sports such as soccer (Schlesinger & Weigelt-Schlesinger, 2012), would be beneficial as previous research has reported that they frequently feel isolated from social networks (Allen & Shaw, 2013; Norman, 2010b).

Turning to theoretical implications of social support and stressors, coaches experienced and perceived that social support had stress-buffering and main-effects on stressors. For example, coaches discussed the use of informational support in the form of information about a competitive event prior to and during the occasion provided stress-buffering and main-effects. Interestingly, it seems that the support resources offered to an individual had beneficial effects regardless of the scale of support but appropriateness of the resource offered in relation to the situation was important in coping with a stressor. Previous social support and health research has found that both stress-buffering and main-effects have a positive influence by helping to cope with and reduce the negative effects of stressors (Lakey & Orehek, 2011; LaRocco, House, & French JR, 1980; Uchino, 2006). These findings and that of the current chapter point to the importance of social support to cope with stressors and maintain positive health. This can help to reduce the amount of coaches experiencing burnout (Malinauskas *et al.*, 2010) and retain the number of male and

female coaches in the profession.

Reflexivity was maintained throughout this chapter, which brought to light a number of strengths and limitations. The current study has numerous strengths. One such strength lies in the research design and the use of multiple methods to collect data that offers detailed information on and novel insight into coaches' experiences and perceptions of social support. Previous research on social support among coaches has been predominantly cross-sectional and used semi-structured interviews only (e.g., Knights & Ruddock-Hudson, 2016; Olusoga *et al.*, 2010; Thelwell *et al.*, 2008a). The use of a longitudinal approach in the current study extends previous knowledge by providing unique data on coaches' social support experiences across three different periods in time over a six-week period (e.g., Levy *et al.*, 2009). Another strength of the study relating to research design is the use of interviewee-aided photo-elicitation. There is a wealth of research on coaches that utilizes interviews, however, the use of photos within an interview provides novel insights into coaches' perceptions of their social network. A third strength is the sample that included male and female coaches who were purposefully selected from a range of team and individual sports and coaching levels. This is important because the previous research on coaches is saturated by high level male coaches' experiences, which creates a gender biased picture of coaches' experiences that need to be diversified. This study also adds to the development of knowledge in terms of social support and stressors. In particular, it extends the previous health psychology literature by exploring the stress-buffering and main-effects with sports coaches finding that coaches perceived social support had both main and buffering effects on stressors.

Although the present study provides a number of novel strengths, there are some limitations that value attention. Despite sampling both male and female coaches, this study did not specifically focus on the experiences of specific genders. Previous research has suggested that male and female athletes may experience stressors and cope with these stressors in different ways (Kaiseler *et al.*, 2012). Therefore, it may be useful to explore male and female coaches' experiences separately to develop an in-depth understanding of their coping preferences. This would provide a depth and breadth of males and females experiences of social support so that practitioners can tailor support toward specific individuals and or gender. Whilst this provides a range of coaches' experiences from different performance and sporting contexts, it does not offer in-depth understanding of a particular sport or performance context. Future research should aim to narrow the focus by exploring coaches' experiences of specific sports and within different performance contexts (e.g., elite, non-elite).

The use of longitudinal research is still limited (Lazarus, 2000) and it would be useful for future studies to observe the experiences of coaches' social support resources over a longer period (e.g., a season) to explore the changing or stable use of social support to cope with stressors in a highly volatile and changing environment (Thelwell *et al.*, 2010). From this, practitioners and organizations can tailor support for coaches at specific times during a season (e.g., more informational support pre-season). It is also recommended that future researchers explore perceived and received social support functions. This will help practitioners and NGBs understand how they can offer support that coaches perceive as more satisfactory (e.g., instrumental support to provide opportunities). Finally, coaches perceived that social support had stress-buffering and main-effects on stressors. It

may be beneficial to explore which social support resources provide stress-buffering effects so that support can be provided to a coach to buffer against the effects of a stressor before it has occurred. This way, practitioners can design applied interventions prior to stressful events (e.g., major competitions) that provide a barrier to the negative effects of stressors. This way, coaches can be educated on the stressors that they may occur and the relevant social support resources available to cope with the stressors.

4.5. Chapter Reflections

The previous literature on interviewee-aided photo-elicitation reports the positive rapport building effects and increased depth of knowledge collected through this method (Phoenix, 2010). However, during data collection for this chapter, I was nervous about the coach's responses to being asked to find and or take images to bring to the second interview. Due to my initial reservations, at the end of the second interview, coaches were asked about their experiences of using this technique. The response from coaches was positive as shown by three of the coaches providing the maximum 12 images and the other seven coaches providing between five and seven images for the second interview. One coach even supplied additional photos during the third interview. The following quotes from Rosy and Lily respectively, emphasize how using this technique made them think intensely about what images they wanted to use and the reasons behind it:

Yeah too many [ideas]. Wanted to get on and do it! Then I was thinking about them a lot like "I could take a picture with this now" trying to think of like metaphors...

I think it's [photo-elicitation] quite good, because, um, I like pictures so I am a visual learner, but actually soon as you start seeing the photo you got a thing in your head and thinking right okay so the photo's gonna be a friend's, but then you're thinking like is it friend or is it certain friend that is . . . and then you're like well actually it will be these friends, but ultimately I go to this friend a lot more than I go to these, but in other situations so then I start thinking about exactly what photos I'll be taking for what. I realize actually that you could end up with hundreds of photos...

Due to the complex nature of this chapter owing to the various topics being explored, there were significant discussions on how best to represent the longitudinal data most effectively. Scholars have frequently suggested the need for additional longitudinal research (e.g., Levy *et al.*, 2009; Thelwell *et al.*, 2010) but representing these findings can be difficult (Holland, Thomson, & Henderson, 2006). To combat this challenge in the current and following chapters, thick quotes were selected from the different time points that related to the aims of the research. Additional considerations were had regarding the representation of longitudinal research in tables. During the early write up phases of this chapter, it was clear that the tables did not fully illustrate the longitudinal nature of the data. After significant discussions with my supervisory team and various attempts to represent the data effectively, it was decided that the themes from the chapter would be best represented through separate tables for each time point so that the reader can clearly see the themes constructed during each round of interviews.

4.6. Chapter Summary

The present study provides insight into male and female sports coaches' social support resources longitudinally over a six-week period, in addition the study investigated coaches' perceptions of social support and its perceived effects when coping with stressors. The findings develop the current social support literature and the results presented in chapter three by demonstrating that coaches use all four types of social support resources (appraisal, emotional, informational, and instrumental), in particular informational support, over a period of time. Interestingly, the current chapter highlighted new insight that coaches appear to use multiple social support resources to cope with the same stressors. The novel methods that were employed also offered visual data and new understanding on coaches' perceptions of their social network and themselves within the network. Coaches perceived themselves to be the center of the network but also highlighted the importance of reciprocal relationships. If these reciprocal relationships are present then this can have important implications for perceived support function of social support and coach's satisfaction with their social network. Coaches also perceived that social support had both stress-buffering and main-effects on stressors.

This chapter contributes new insights into sports coaches' experiences of social support resources and perceptions of social support. Of particular importance is the insight into coaches' use social support resources over an extended period of time that have not been previously explored. The results and future directions highlighted by this chapter and that of chapter three helped to inform the purpose of the following chapter. The previous chapters investigate the social networks of sports coaches and the social support resources provided by the network members to help enhance coach development and PWB. Chapter five progresses on from this by

exploring social support functions and whether coaches perceive their social support network and the resources provided by the network members as satisfactory. The perceived satisfaction of their social support network and resources is particularly significant with female coaches who have to work in a profession dominated by males and that govern the social networks (Norman & Rankin-Wright, 2016). The following chapter advances the current social support and sports coaching literature by exploring female coaches social support functions. Research of this nature provides new insight by being one of few studies to focus solely on female sports coaches using a longitudinal case study approach.

Perceived and Received Social Support Functions among UEFA B Female Soccer Coaches: A Longitudinal Multiple Case Study

The aim of this chapter was to explore the perceived and received social support functions among UEFA B female soccer coaches using a longitudinal exploratory multiple case study. Three white, part-time UEFA B licensed female soccer coaches were interviewed twice over a five-month period to investigate social support functions. The systematic review highlights the underrepresentation of females in coaching research (females counted for only 22.5% of the sample from the reviewed articles were female) and the prominence of research with high-performance and elite level coaches. Advancing knowledge with female coaches can inform organizations and NGBs on effective ways of providing them positive support (e.g., during continuous personal development) and coaching experiences. Coaches who encounter positive experiences are more likely to stay in coaching (Sagas *et al.*, 2006). The performance level of coaches can also be a major determinant of how they perceive their role as a coach (Gilbert & Trudel, 2004). The inclusion of more roles and responsibilities can increase perceived stressors. Social support may play an important part in coping with the additional stressors (e.g., informational support from other coaches regarding what formation to play). Soccer coaches that hold a UEFA B qualification have the opportunity to progress to the next performance level which can increase the number of stressors through changes in roles and responsibilities. This makes soccer coaches who hold a UEFA B license, a context that requires attention.

Chapter three provided information on coaches' social support networks and results from chapter five highlighted what coaches perceive to be important with regards to their social network. This chapter continues on from the previous chapters by investigating whether coaches are satisfied with the perceived support network and the social support resources that they receive. Perceived and received support may have an important role in facilitating coping with stressors by increasing one's self-efficacy and belief that they can cope with the situation (Schwarzer & Knoll, 2007). This chapter will aim to focus on female coaches' social support functions and their satisfaction with their social networks. Overall, this chapter will aim to answer calls from the systematic review and chapter four to explore perceived and received support with female coaches. This research sits within the social support literature and is important theoretically to understand the conceptualization of social support functions with sports coaches. The research also enhances the coaching literature by exploring female coaches' experiences and the potential impact this can have on PWB, intentions, and coach development. The theoretical link to PWB can have applied implications. Understanding social support functions with coaches means that NGBs can provide support that enriches PWB. The consequence of this being that coaches take less days off work and can make more effective decisions that increases both coach and athlete performance.

To begin the chapter, a review of the relevant literature on female coaches and social support will be presented. Following on from this, the specific methods used in this chapter are discussed. To comprehensively explore social support functions with female soccer coaches, a multiple case study approach was utilized. Subsequently, the results from the two rounds of interviews will be offered through quotes and discussed in relation to previous research. To conclude, future research

directions are identified and a conclusion and summary of the chapter is provided.

5.1. Review of Relevant Literature

The growth of soccer participation worldwide for females has been dramatic over the past decade. As a result, soccer is now the number one participation team sport for females in a number of countries including England, Norway, and Germany (UEFA, 2017). However, the same growth of player participation has not been mirrored with coaches. According to UEFA (2017), for every nine female coaches in England, there are 91 male coaches. The gap between male and female coaches is even more noteworthy when considering qualified coaches. For example, in England, there are approximately 10,033 UEFA B qualified male coaches and only 301 UEFA B qualified female coaches (UEFA, 2017). This demonstrates that there continues to be a lack of female coaches in soccer and that there is a need to specifically explore their experiences to understand the factors that deter them from a career in coaching whilst also reflecting on potential ways to increase additional female coach's engagement with the profession.

Existing research with female coaches highlights the multiple challenges that females face when pursuing coaching as a profession (e.g., Fielding-Lloyd & Meân, 2011; Kilty, 2006; Norman, 2014; Norman & Rankin-Wright, 2016). Early research by Lowry and Lovett (1997) conducted a cross-sectional survey-based study with American intercollegiate coaches to explore why female coaches leave the coaching profession so frequently and concluded that a prominent factor was the social conditions that they encountered, such as experiencing discrimination from male colleagues. More recent cross-sectional quantitative research has supported this idea by finding that a lack of and or unhappiness with the social network in university and

college female assistant coaches from the United States of America appeared to have lower intentions to progress as a coach and higher intentions to leave the profession than their male counterparts (e.g., Cunningham & Sagas, 2002, 2003a, 2003b; Sagas *et al.*, 2006). While the published quantitative cross-sectional data has illustrated potential reasons for females to leave the coaching profession, in particular social conditions, and has also shed light on the gendered and male dominated nature of coaching in university and collegiate settings, it has failed to fully explain female coaches' social support experiences.

More recent studies have focused on female coaches' experiences using qualitative approaches (e.g., Allen & Shaw, 2013; Norman, 2010a, 2010b, 2013, 2014; Norman & Rankin-Wright, 2016; Schlesinger & Weigelt-Schlesinger, 2012). Collectively, it was found that these individuals frequently feel undervalued, isolated, and discriminated against. For example, female coaches from a variety of levels (e.g., recreational, club, and international) and sports (e.g., cricket, squash, and swimming) commented during interviews on isolation and exclusion due to the informal 'closed' social networks within the coaching community as a barrier to progress in the profession (Norman & Rankin-Wright, 2016; West, Green, Brackenridge, & Woodward, 2001). To elaborate, female senior national head coaches of different sports (e.g., athletics, soccer, and basketball) who were based in the U.K., discussed the difficulty of developing and maintaining coaching relationships because of the perceived hostile coaching environments created by the males who were perceived to dominate the coaches' social networks (Norman, 2010b, 2014). Such hostile environments also provided unpleasant contexts for female NCAA division one head coaches, which contributed to a lack of connectedness or belonging to the coaching community (Bruening & Dixon, 2007).

It should be noted that the majority of the coaching literature portrays a negative picture of female coaches' experiences through a feminist sociology lens and or with female researchers (e.g., Kilty, 2006; Norman, 2010b; Norman & Rankin-Wright, 2016; West *et al.*, 2001). This study will provide a different viewpoint to the sports coaching research by exploring the negative and positive experiences of female coaches through a social constructionist paradigm and a male researcher's perspective. As highlighted in chapter two, researchers with different philosophical assumptions will use different methods, data analysis techniques, and interpret data (e.g., interview transcription) differently (Mackenzie & Knipe, 2006). Therefore, presenting female coaches experiences from different viewpoints allows readers to make a more balanced judgment from the information provided.

Despite the increased attention on female coaches, there is still limited research in comparison to male coaches (see systematic review). For example, an area that requires attention is understanding performance (e.g., UEFA B qualified) contexts that frames coaches' social support experiences (Norman & Rankin-Wright, 2016). The UEFA B qualification is the highest available grassroots qualification in soccer and is the first level where coaches can work in elite settings (e.g., academies; The Professional Football Association, 2017). The transition into an elite environment and a different performance context can be stressful due to the new surroundings and increased expectations (Olusoga *et al.*, 2009). For example, youth team sports coaches working at higher performance contexts perceived that they had to fulfil more roles and that other responsibilities (e.g., tactics) changed at the higher levels (e.g., more of a focus on team tactics; Gilbert & Trudel, 2004). Therefore, coaches may require a variety of social support resources (e.g., informational support in the form of advice about how the club works) to help them make the transition

into the new setting. This highlights the need to further understand female coaches' experiences in performance contexts such as those who hold a UEFA B license.

Taken together, the quantitative and qualitative sport coaching literature with female coaches has found that they frequently experience difficult social environments and may feel removed from the coaching community. This provides an opportunity to develop the social support literature and for support functions to be studied with coaches, in particular with female coaches, who have often reported to not be satisfied with the social networks or social support resources provided (e.g., Norman, 2014). Individuals who are more socially integrated and satisfied with their social network are disposed to have higher levels of physical and PWB (Barrera, 1986; Gottlieb & Bergen, 2010; Melrose *et al.*, 2015; Uchino, 2009). This can have important implications for female coaches' PWB in a male dominated profession and increase female intentions to stay in the coaching profession. Especially as the aforementioned research has shown the importance of social support and social networks for female coaches' intentions and development (e.g., Lowry & Lovett, 1997; Norman, 2014; West *et al.*, 2001). However, there is still limited research with female coaches in comparison to male coaches. For example, an area that requires attention is understanding performance (e.g., UEFA B qualified) contexts that frames coaches' social support experiences and contributes to female coaches' poor representation (Norman & Rankin-Wright, 2016). Studying coaches in the UEFA B context is important to make the transition into elite coaching easier and therefore increase the number of female coaches at the highest levels. Therefore, the aim of this chapter is to use a longitudinal exploratory multiple case study approach to explore perceived and received social support functions with UEFA B licensed female soccer coaches. The aim of this chapter links to the fourth contribution of the

thesis by gaining an understanding of coaches perceived effects of social support on stressors.

5.2. Methodology and Methods

5.2.1. Interviewees

Opportunistic sampling was used in this study (Patton, 1990). This type of sampling takes advantage of unforeseen opportunities to work with interviewees that are often hard to gain access to (Suri, 2011). In the current study, an opportunity emerged through The English Football Association (FA) to gain access to a minority sample of female soccer coaches who had recently been through the Black, Asian and minority ethnic (BAME) bursary scheme (The FA, 2018). In total, three white British female soccer coaches ($M_{age}=26.6$, $SD=1.2$ years, $M_{experience}=7.6$, $SD=3.7$ years) volunteered to take part in this study. At the time of data collection, coaches were all head coaches, UEFA B qualified, and coaching at either a Regional Talent Club (RTC), university, open age team, or with the county FA. The coaches were eligible for the BAME bursary program by being a female in a male dominated profession and therefore are categorized as minority. This provided them with additional funding and support from the FA to assist in completing the UEFA B coaching qualification. The UEFA B soccer coaching qualification is the third level of a five-level qualification scale developed by The English FA and is the highest grassroots qualification available to coaches.

5.2.2 Study Design

A longitudinal exploratory multiple case study approach was adopted for this study to explore perceived and received social support functions with UEFA B qualified female soccer coaches. Case studies have been used with athletes (e.g.,

Woodman & Hardy, 2001), but the systematic review highlighted that only two of 38 studies reviewed used a case study approach with coaches. This approach can provide detailed preliminary research (Baxter & Jack, 2008) in the phenomena of social support that is currently lacking with coaches by focusing holistically on the interviewee's experiences. A key challenge of case studies is often gaining access to suitable samples (Walsham, 2006). The opportunistic sampling employed during this study provided a possibility to work with an underrepresented sample in female coaches that was even more distinct by being UEFA B qualified coaches who had taken part in the FA BAME scheme. The sample also helped to overcome another common pitfall associated with case studies in that researchers frequently attempt to use a case study to answer a question that is too broad or has too many objectives for one study (Baxter & Jack, 2008). In order to avoid this problem, it has been suggested that placing boundaries can prevent this issue including by definition and context (Baxter & Jack, 2008). The defined sample of UEFA B qualified female soccer coaches to explore the functions section of the social support conceptualization offers a rationale for the use of a multiple case study. Overall, the capability of a multiple case study to holistically explore an individual's experience of a phenomena in a specific context and create more robust and reliable information than a single case study approach (Casey & Houghton 2010; Yin, 2013), makes it suitable for this chapter to explore female soccer coaches' experiences of the social support phenomena in a UEFA B context.

5.2.3. Data Collection

5.2.3.1. Interview Guide. A semi-structured interview guide (see Appendix M) was developed specifically for this study using previous literature on social support with coaches (see chapters four and five) and athletes (Kristiansen & Roberts, 2010). Interviews occurred over two separate interviews five months apart (November to March). This correlates with the second half of the soccer season that can be particularly stressful and so may provide additional experiences of social support. This time frame also allows for the coaches to gain new experiences and ensure a thorough understanding of the cases. The depth of description and understanding of the cases were facilitated by myself conducting all of the interviews to ensure consistency in the delivery of the interview questions. This process aligned with the criteria specific for case studies offered by Creswell (2007).

The interview guide for the first round of interviews was divided into two sections. The first section focused on the coaches' demographic information and coaching background (e.g., "How did you get into coaching?" and "Tell me about your experiences as a coach to date"). The second section of the interview guide was designed to ask questions about the coaches' social support functions (e.g., "Tell me about your relationship with others"). The second round of interviews followed the same structure as the first round but also asked questions about any changes since the previous interview. In the first section, questions were designed to ask about their general coaching and personal experiences since the first interview (e.g., "How has your coaching been going?" and "Has anything significant happened in your life since we last met (e.g., major life events?"). The second section focused on changes in social support functions (e.g., "Have your relationships changed?"). These

questions were intended to encourage discussions about coaches' social support functions.

A total of six interviews were conducted: five interviews took place face-to-face and one interview was completed on the telephone. The telephone interview was conducted because the coach was not available to meet in person. The first interviews were conducted in October, November, or December 2016 with the follow up interviews being conducted in February or March 2017. The interviews were recorded using a digital recording device and lasted between 56 and 146 minutes ($M_{length}=84$, $SD=18.3$ minutes).

5.2.4. Data Analysis

As outlined in chapter two, each interview transcript was analyzed using abductive latent thematic analyses (Braun & Clarke, 2006) using NVivo (QSR International Pty Ltd, 2016). This ensured that themes were strongly linked to the data (Nowell *et al.*, 2017) whilst also being deductively analyzed into themes of perceived and received support. After completion of the first round of data collection, each of the three interviews was analyzed to create lower- and higher-order themes that represented the three coaches collectively at this point in the data collection period. The same process occurred after the second round of interviews. Once each time point had been analyzed separately, the data were then re-analyzed to create themes for each individual coach for each of the two time points. These two phases of data analysis were conducted to ensure that themes were created that related to the aims of study, provided information on changes over time, whilst also ensuring the holistic approach of a multiple case study by individually analyzing each interviewee (Baxter & Jack, 2008).

5.3. Results

The results section presents the perceived and received support experiences of three female head soccer coaches who each held a UEFA B coaching license at the time of data collection. The results are broken down into perceived (availability and satisfaction with social networks and social support resources) and received (actual exchanges of social support resources) support and described in the context of their coaching level and profession by providing examples of their everyday experiences. The changes, or lack of, from individuals experiences over the two time points are also highlighted. Due to the lack of representation of UEFA B qualified female soccer coaches in the U.K., pseudonyms are used throughout to protect the coach's identities and maintain confidentiality. It is important to note that due to the sample being from the U.K., the term football was used by the interviewees. To maintain the true representative of quotes, football was used instead of soccer.

5.3.1. Elizabeth

Elizabeth, a 28-year-old coach, had 12 years of coaching experience at the time of her first interview. She was a head coach for a university female soccer first team and ran a local grassroots soccer and futsal club. Elizabeth was also employed by her county FA and on the day of the first interview, had just been accepted on the FA coach tutor license course. The FA coach tutor license allows coaches to tutor and lead on coaching courses.

Table 21

Elizabeth's Social Experiences over the Two Time Points

Raw Data Themes		Lower-Order Themes	Higher-Order Theme
Interview One	Interview Two		
Access to Social Network (23)	Access to Social Network (12)	Perceived Support	Social Support Functions
Lack of Social Network (6)	Lack of Social Network (4)		
Additional Opportunities	Additional Opportunities (3)	Received Support	
Coaching Courses (8)	Coaching Courses (6)		
Sexism (5)	-		
Work Expectations (3)	-		

Note. Numbers in parentheses demonstrate frequency counts among the data

from the coach. The same approach to data representation has been applied in Tables 22-23.

5.3.1.1. Perceived Support

With reference to the perceptions of availability of the social network and the satisfaction of social support resources offered, Elizabeth mentioned how she perceived that there was a lack of support available from her social network when she was coaching. In particular, she provided insight into the perceived insufficient formal social network: “But its things like that [support from friends and players], that is kind of informal support. I don’t really have a formal support network.” This was reinforced by the following quote from the first interview where she described that she often coached alone in both the university and club settings:

So [at the university] I’m pretty much on my own, and at my club. I’ve got other coaches around me, but they kind of dip in and out. So, it would be really good, I think, next, going into that environment where I’ve got potentially people that can support me better.

Elizabeth also discussed the perceived availability of support from her family. More specifically, she mentioned that she had moved away from family because of work and therefore was not satisfied with how often she got to see these members of her social network:

I think the only thing I'd change is being probably nearer my family. Because they all live within five miles of each other in[place], so I'm like the one that moved away, so I don't . . . I see them probably once a month, if I'm lucky because I have a lot going on.

Despite the perceived lack of a formal support network, Elizabeth commented on the perceived availability of the social network that she did have. For example, Elizabeth frequently mentioned during both interviews how she felt satisfied and privileged with the support network that she had with her close peers, which she also classed as her friends. This was highlighted during interview one:

And I think it's a privilege, with the work that I do. I got a lot of contacts and people that I can ask, and people that ask me, or, "can you come and do this coaching for us?", and stuff like that, so it's a good environment to be [in].

In the second interview, Elizabeth reiterated this by discussing how her available social network provided a good environment:

I am quite lucky in that in my office I have got like football people and quite a few other tutors, coach mentors, der, der, der. So that is a good environment, I think. If I do change job, that is something I will probably miss a little bit. But I will still have those people. Those people that I consider like friends...

With regards to changes over the two time points, there were not many differences with perceived support as highlighted during both interviews that she felt supported by the coaches around her. However, during interview one, Elizabeth discussed that she coaches on her own at the university but between the first and second interviews, she mentioned that she had been assisted by another coach: “So in the beginning of the year we had umm, I had a student shadowing me and part of the motivation for that was that she got put on a coaching course and she had to complete 15 hours.” However, prior to the second interview, the assistant coach had already left: “After those 15 hours were done, she dropped off. Even though she was doing well and we was like having loads of really good conversations and she was doing good stuff...” In addition, she mentioned in both interviews how she would like to change her relationships with her family: “The only thing I would probably say is I don’t go home enough to see my family. That is the only thing as it is.”

5.3.1.2. Received Support

Over the course of the two interviews, Elizabeth highlighted receiving both undesirable and positive supportive behaviors as a female coach. Firstly, she received undesirable behaviors in the form of sexism during her coaching journey: “...still day-to-day, you’ll get comments from people, or questions from people or . . . I went to a college the other week and a student came up to me who said, girls shouldn’t be playing football.” Another example that she provided was when a family member questioned if she was taken seriously as a female coach:

I think . . . when was it? About two years ago, one of my family members asked me . . . she didn't have a clue what I do, I rarely see her, probably see her twice a year, and she knows I work in football, and she's like, do people take you seriously because you're a woman? And no joke, that's what she said to me. This is from a female. And I was like, what planet are you on?

Elizabeth also mentioned receiving positive social support exchanges with her social network. For example, in interview one, Elizabeth discussed the early instrumental support that she received from her dad when she first started coaching:

I coached pretty much . . . majority of the age-groups. I did all the tots and then they asked me to . . . because I was just dead keen, so I'd do everything. It was real dad's taxi, taking me round to all these different sessions before I was old enough to drive.

An important context where Elizabeth received positive exchanges of social support resources was during coaching courses. Elizabeth mentioned in both interviews about not being treated any differently during coach education courses: "On the [UEFA] B license course I wasn't treated any differently to the others [coaches on the course]. But I think that's down to them as people as well." The following quote illuminates how receiving support from a course tutor during a soccer coaching course, enthused Elizabeth to become a tutor herself:

...even before I'd ever done a coaching session, I'd been put on my coaching course, and then I really enjoyed it, I loved it! And we had a really great tutor, as well. And that's one thing I said at my tutor interview, they were like, "why do you want to be a tutor?" I said, "because my first

experience of going on a football course made me coach for the last 12 years, so if I hadn't have had that positive experience at 16, I definitely wouldn't be in my job that I'm in now, and I definitely wouldn't be coaching and killing myself through football!"

Similar to perceived support, there were not many changes for Elizabeth and received support. As highlighted in Table 21, the FA BAME Bursary Scheme and sexism was only discussed by Elizabeth in interview one. However, there were some differences in the types of support she received relating to opportunities. During the first interview, Elizabeth discussed financial support that provided her with coaching opportunities:

I don't think I would have done my B license if the bursary wasn't around, just because of the money factor. Because it's expensive. And this made it a lot cheaper. So instead of it being, what is it, £720? Because I am a licensed coach, it was 120 quid.

Whereas her experiences in the second interview were about opportunities provided for her to develop her coaching:

I have probably had more opportunities for being a woman to be honest. For at the time we are at the minute like, umm kind of balance things out a little bit more and get more women, BAME people, into the game...

5.3.2. Racheal

Twenty-five-year-old Racheal had eight years coaching experience and was assistant coach at an open age female soccer team at the time of the interviews. During the first interview, Racheal was head coach at an RTC but had moved to assistant coach of an older team at the RTC by the second interview. Alongside coaching, Racheal was also completing a doctor of philosophy.

Table 22

Rachael's Social Experiences over the Two Time Points

Raw Data Themes		Lower-Order Themes	Higher-Order Theme
Interview One	Interview Two		
Access to Social Network (19)	Access to Social Network (14)	Perceived Support	Social Support Functions (10)
Lack of Social Network (3)	Lack of Social Network (5)		
-	Additional Opportunities (2)	Received Support	
Coaching Courses (3)	-		
-	Lack of Opportunities		
Proving Herself (11)	Proving Herself		
Sexism (10)	Sexism (2)		

5.3.2.1. Perceived Support

Focusing on the accessibility of the social network and satisfaction of social support resources offered, Rachael highlighted during the first interview that she perceived that there was a lack of social networks due to the male dominated networks encountered when coaching at a football foundation. The following quote describes how she felt uncomfortable with the conversations that the formal social network was having at the foundation where the office was dominated by male staff:

When I first started, I was the only female coach that worked at the Foundation, so I'd go to work every day and some of the conversations I didn't feel comfortable joining in because it was all about women and what the lads had got up to this weekend and lad culture.

Moreover, during the second interview, Rachael discussed the male dominated social networks in her current coaching role and the negative impact that this has had:

Umm . . . despite the fact that there is pretty much an equal men to women ratio in the center [RTC], in general, women are far outnumbered in coaching so in that respect it has a negative impact because I feel like I am a minority . . . wherever you go that is not the center you have people looking at you and it is like errrgh!

On the other hand, Rachael was satisfied with other sections of her social network. For example, during the second interview she discussed frequently seeing and using her close informal network of friends as support:

So friends I have kind of got a core group of 6 or 7 friends that are really close and I live with a couple of them and I see the others all the time and I play sport with them and this, that and the other and like I see them and lean, not lean on them all the time but . . . but do you know what I mean like they are my best friends, I see them all the time.

Also, during the second interview, Rachael mentioned that, despite potentially not speaking to her family for a couple of weeks, she was close to her family and in particular her dad:

Umm, family. I am very close to my family but we do not speak to all the time. We are quite happy to bob along for a couple of weeks and then get in touch or whatever but like we are close. I am very close to my dad. I think we are very similar.

With reference to the more formal social network that was available to Rachael, she discussed during the first interview how she felt the set-up and support available at the RTC she coached at was positive for her coaching development:

...just in terms of the positive stuff, like the RTC now, that's a very good set up to help me, well, to help me as a coach, but also help me enjoy it and help the players develop, because I don't have to worry about injuries or I don't have to worry about something [else other than coaching].

In the second interview, she provided a more specific example of being satisfied with the formal network at the RTC by talking about the coach she works alongside at the center:

...I do really enjoy coaching and like I said I feel with the under 14s, I feel a little bit more pressure but the guy that I am coaching with he is absolute class and he has coached [with] me before and I really like him. I get on with him as a coach and as a person...

Analysis of the themes over the two time points highlighted that the main change for Rachael was the perceived support at the RTC. During the first interview, she highlighted the perceived positive support: "... just in terms of the positive stuff, like the RTC now, that's a very good set up to help me, well help me as a coach, but also help me enjoy it and help the

players develop.” Whilst the perceived positive support from the RTC did not change in interview two, Rachael was now coaching a different age group and therefore, her support had changed:

I have less control now whereas with the 12s, I was the lead coach and [coach one] would just look at me and go what are we doing on Sundays . . .Whereas now, it is probably the other way round, so [coach two] is the lead coach and more experienced. So, I would input to him obviously, and to be fair, he never just says no, he always takes things on board but he will more or less have the final say.

5.3.2.2. Received Support

Rachael discussed during the two interviews on the supportive and unsupportive behaviors of her social network. In interview one, Rachael discussed the negative exchange of social support resources she experienced in terms of sexism. She provided an example of when she was coaching at a school and one of the students made a comment about her being a female coach:

I was doing [coaching]; it was all boys . . . there was a couple of times where I’d go into schools and the old boys after-school club . . . they’d look at me and be like, “where’s our football coach?” I’d be like “I’m your football coach.” And they’re like, “no! You’re a girl”. And I’m like, you’re five years old, you don’t even know what a girl is. You don’t the difference between a boy and a girl but you know that a girl can’t coach football. So that used to really piss me off, but again, you’d do a few kick-ups, they’d be fine.

Furthermore, during interview one, she reflected on doing a mixed gender course and the feeling of having to prove herself:

Better environment [the female only course], I thought. I think it was more . . . inclusive isn't the right word, but I think welcoming. When I think of my Level 2, there was me and two others, so there was three females in a course of 25. There is definitely this air, and I don't know if it's just me, it could just be me, but when you go, you have to kind of prove yourself as a woman that you belong there. I always feel like I'm spending the first couple of days showing people that I can play football, even though it's a coaching course.

She compared this to attending a female only coaching course and the positive support exchanges she encountered in that environment: "I really liked the female-only environment, I liked working with the tutors. They were quite high-profile tutors, as well. So that was really good. Really quite cool to learn off them, and learn from other female coaches." Rachael also received supportive behaviors from her friends. For example, in the second interview, she discussed the instrumental support that her friends offered her in terms of doing other things away from coaching, which she felt, had an impact on her well-being:

Like it is nice on an evening or a weekend to have something else to do, something else to speak about whether it is something as simple as chat about something over dinner or just "how has your week been?" And I think that is quite good for your well-being . . . so I think it is quite important for my well-being in terms of feeling, well like I have got friends and whatever else and that then obviously impacts on my coaching.

There were not any major differences highlighted during time points one and two for Rachael's received support. She emphasized feeling that she continued to receive supportive behaviors from her friends, family, and other coaches. A common reoccurring theme during both interviews with Rachael was the psychological effects of sexism on her coaching:

It's like psychologically, you think about doubting yourself, confidence, stressing about, I always used to hate going into the school for a first time because I knew I'd get the same reaction. So, the week leading up to going into a new school, I'd be really not looking forward to it. (Interview One)

It is just something that is always there at the back of my mind and it links, well it kind of links back to the bursary scheme in a way like some people have said, not to me but, I have heard some people suggest "well did she only pass because she is a female." (Interview Two)

5.3.3. Helen

Helen was a 27-year-old female soccer coach with three years coaching experience at the time of the interviews. She was employed as a head coach at an RTC as well as a general manager at a Women's Super League (WSL) club.

Table 23

Helen's Social Experiences over the Two Time Points

Raw Data Themes		Lower-Order Themes	Higher-Order Theme
Interview One	Interview Two		
Access to Social Network (9)	Access to Social Network (3)	Perceived Support	Social Support Functions
Lack of Social Network (3)	Lack of Social Network (2)		
Coaching Courses (2)	Coaching Courses (4)	Received Support	
Lack of Opportunities	-		
-	Personal Issues (4)		
Sexism (5)	-		

5.3.2.1. Perceived Support

With reference to the satisfaction of availability and access to social networks, Helen perceived that she had reached her current coaching position predominantly on her own:

...I've not had an amazing amount of support from external people as such, like the FA. It's not like they've walked me through [coaching], I've had to do it on my own as such. Yeah, I don't think any coach would really feel that they've been walked through and had that support massively.

In the second interview, Helen highlighted that there had been little change with her social network since the first interview. The one change to her social network was that the assistant coach she was working with at the RTC had left, meaning she was now coaching alone:

Not a lot has changed. I had an assistant coach who has now left as of about two weeks ago so that is just me with the 14s but it has been pretty much me with the 14s since around December, late November anyway

because he [coach] couldn't make sessions so I have just been taking them on my own pretty much.

However, Helen discussed the available social network of other staff at the RTC was a good network for her: "But internally, within [club] and the RTC, we've got a good support network . . . so it's more internally. Where we work is good."

This was highlighted by the following quote about maintaining the relationships she had at the RTC between the two interviews, which can increase her coach effectiveness:

It is my third year at [club] now and 80% of us have ben there for 2 or more years so obviously yeah, you get to know how people work and get to enjoy that professional relationship as well. Yeah, I would say if none of us was happy with how each other works we probably would be pretty honest or we just wouldn't be working with each other anymore so that obviously works in terms of how we all manage our relationship with each other.

5.3.2.2. Received Support

Focusing on the exchanges of social support resources, Helen largely spoke positively about the resources she received. For example, during interview two, Helen mentioned the instrumental support she received from her male technical director at the RTC that had helped her get onto the UEFA B coaching course:

...you have got to get a letter of recommendation. I got the letter from the technical director at the time. Me and another coach who worked at the RTC together as well and we both got on and a couple of months later we were doing it.

Furthermore, also in the second interview, Helen discussed using her coaching peers, who are now also friends, for informational support to talk to them about coaching: “Umm well yea more so that the people I work with have now become friends who just happen to be coaches as well so obviously I talk to them about coaching.” Turning to the context of coaching courses, Helen encountered mixed exchanges of social support resources such as during the first interview when she discussed how one of the tutors on her UEFA B course treated her differently to the other male coaches:

Yeah, so the tutors, one of them took to me a little differently, but in a good way, because I think he thought “oh, she’s the only women here, I’ve got to be a bit nicer to her” and then as soon as I did a session on pressing, I think, within the first week, and he was just like “oh, OK, she doesn’t need my help” And I don’t mean that in the big-headed way, it was just a . . . he sort of felt I . . . he had a daughter, and you can sense when older guys are like “oh, I feel it would protect her, she’s the only girl.” But then he saw that [my coaching session] and he was like “ah, OK, she doesn’t need my help.”

As highlighted in Table 23, there were a couple of changes for Helen between time points one and two. The key one relating to personal issues was her dad having a major illness, which affected her social support: “In December I found out that my dad had cancer so he was in the hospital for three months and he has literally just got out last week so yeah that was pretty significant I guess.” The other change was more positive and related to the relationships she had developed at work and how that can help with her coaching: “Umm yea more so that the people I work with have now become

friends who just happen to be coaches as well so obviously I talk to them about coaching.”

5.4. Discussion

The purpose of this study was to explore perceived and received social support functions with UEFA B licensed female soccer coaches using a longitudinal exploratory multiple case study approach. The findings on perceived support highlight that the female soccer coaches perceived that they had a lack of access to formal social networks that could help with coach development. However, the formal and informal social networks that they did have access too were perceived as supportive. Specifically, social support was received from friends, family, and peers. For example, positive exchanges of social support resources came from parents providing instrumental support by offering lifts to coaching sessions. Coaches also encountered social support exchanges that were unsupportive. In particular, coaches experienced sexism from the social network. It seems that female coaches receiving positive and negative exchanges of social support resources in the context of coach education courses is of particular importance.

This chapter is one of the first studies to focus on perceived support with female soccer coaches, with results highlighting the lack of access to social networks. Two of the three coaches mentioned that this was a perceived lack of access to formal networks built up of other coaches and colleagues. A dearth of formal networks may have an influence on female coaches’ progressions in the profession because they do not have relationships available to them that offer opportunities to learn and progress (Allen & Shaw, 2013). One of the potential reasons for a lack of a formal network found during this chapter and that of previous

research (e.g., Kilty, 2006; West *et al.*, 2001) was encountering social networks dominated by males. These findings further highlight the importance of social networks in coach's development and PWB that was reported in chapter three and with national female head coaches (Norman, 2010b; Norman & Rankin-Wright, 2016). This is important because integrating into networks through interacting and working with other coaches can facilitate access to knowledge, information, and support that would help with their development (Stoszkowski & Collins, 2016). Subsequently, a lack of formal networks can provide a barrier for female coaches to receive knowledge and information that is important for them to progress in the profession. This highlights the importance of social support in female coaches' development and the need for additional social learning activities (e.g., local female only coach discussion groups) to facilitate this. Especially as female coaches have discussed that they prefer to acquire coaching knowledge from learning activities when social interactions are involved (Stoszkowski & Collins, 2016).

With reference to received support, the female coaches in this study discussed receiving negative social support exchanges in the form of sexist comments from their social network. Elite female head and assistant coaches in Kilty's (2006) study perceived that they were regularly being judged by gendered assumptions and expectations from coaches and athletes in their social network. Consequently, they felt that they had to prove their competence to the social network to gain and maintain acceptance and respect. Coaches in this chapter also reported that negative comments came from athletes and peers, but described how this could likewise come from family members. Collectively, these results suggest that female coaches experience negative exchanges of social support and feelings of having to prove themselves regardless of the performance context (e.g., level five qualified

coaches working at national level; Allen & Shaw, 2009; Norman, 2010a, 2014; Norman & Rankin Wright, 2016). Receiving negative exchanges of social support can cause female coaches to feel marginalized and isolated (Norman, 2010a), making coaching a less attractive profession and decreasing intentions to remain as a coach (Kerr & Marshall, 2007). This is particularly essential as high-performance coaches have previously highlighted the importance of being connected to individuals (e.g., peers and athletes) and their organization to stay in coaching (Allen & Shaw, 2009).

The current study also provides novel insight into the positive exchanges of social support resources received by female soccer coaches that have not previously been reported in published literature (e.g., Cunningham & Sagas, 2003a; LaFountaine & Kamphoff, 2016; Norman, 2013). For example, female coaches in this study mentioned the importance of receiving instrumental support from family members (e.g., provided travel to coaching) and colleagues (e.g., letter of recommendation to be accepted on coaching courses). Having positive social support exchanges and a supportive environment can assist in improving coaching performance and the ability to cope with stressors (Gould *et al.*, 2002). Female coaches in the current chapter, and that of previous research with County FA or WSL coaches (Lewis, Roberts, & Andrews, 2018), described receiving positive exchanges of social support during coach education programs. In the study by Lewis and colleagues (2018), positive comments from female coaches towards coach education generally included references to the practicality and relevance of the coaching material but also the interactions that they had with the other coaches and tutors during education programs. The findings in the current chapter show the importance of positive social experiences (e.g., helpful tutors on a coach education course) to

enhance female coaches' PWB and intentions to be involved in coaching. Therefore, environments should be created by organizations and NGBs, particularly during coaching courses (e.g., male and female tutors on courses), that make female coaches feel more connected and experience a higher sense of belonging to the coaching community. This may help retain female coaches in the profession whilst encouraging more females into coaching.

As with any research, this study has a number of strengths and limitations. A strength of this study lies in the research design. Longitudinal studies are lacking within the sports coaching literature despite calls from researchers for more research of this type (e.g., Fletcher & Scott, 2010). The current work extends the published research with female coaches by providing insights into perceived and received social support functions experiences over a five-month period. Furthermore, the multiple case study approach provides in-depth narratives of the coaches perceived and received social support experiences in a UEFA B context. The sampling strategy employed and the population under study were also strengths. The opportunity to work with a population that can be difficult gain to access to provides insight into female soccer coaches who also were involved in the BAME bursary scheme and held a UEFA B license. This sample provides research in an area that is still heavily populated by males (see systematic review) whilst also investigating a performance context that can be particularly stressful due to the roles and responsibilities placed upon higher level coaches (Gilbert & Trudel, 2004; Thelwell *et al.*, 2008a). There are also limitations that need consideration. First, the study used a longitudinal approach of two interviews five months apart. Whilst this is a strength of the study, it can also be seen as a limitation. It could be argued that five months without an interview is a substantial gap and therefore reduces one of the main advantages of conducting

longitudinal research which is to reduce the recall of experiences (Menard, 2007). A final limitation is that the study sample were all white British. Whilst not purposefully chosen this way, this sample limits the implications of the research to this specific group and fails to explore coaches' experiences from diverse cultural and ethnic backgrounds.

It is recommended that future research conducts additional qualitative longitudinal research that explores social support functions with female coaches to gain knowledge on whether the access and satisfaction of social networks changes or stays stable over a season. A further avenue for future researchers may be for researchers to work with male coaches and parents of athletes to understand if they perceive their actions towards female coaches as challenging or positive. It might be that these populations do not perceive their comments or actions towards female coaches as negative and therefore do not understand the impact this might have on the individuals. Insight in this area would allow practitioners to educate coaches about creating an environment to build relationships that encourages female coach development and provides more positive social support exchanges to increase their intentions to stay in coaching. Finally, researchers would be recommended to explore female coaches' experiences during coaching courses and the potential influence of this on coaching intentions. Positive experiences during coach education courses may have a role to play in facilitating the engagement and intentions of females in the profession (Vinson *et al.*, 2016).

5.5. Chapter Reflections

During the second round of interviews, I encountered an ethical dilemma. The interviewee organized a phone interview and provided shorter answers to the questions than during the previous interview. In the course of the first section of the

interview guide focusing on general coaching and personal experiences since the first interview, I asked the question “Has anything significant happened in your life (e.g., major life events)?” It was disclosed by the interviewee that there was a serious illness to a close family member that was affecting her. Despite articles (Guillemin & Gillam, 2004) and books (Denzin & Lincoln, 2011; Sparkes & Smith, 2014) on qualitative research ethics warning on the potential occurrence of such events, this caught me off guard and I was unsure of what to do as it was the first time that it had happened to me. In the interview, I extended my sympathies and offered to postpone the interview for a later date. The interviewee insisted that we continue and we completed the interview. After the interview I sent an email thanking her for participation in the interview and followed up a month later to enquire about the interviewee’s well-being. A further challenge during this chapter was being a male researcher interviewing female coaches about their potentially poignant experiences, such as with sexism. This may have influenced the interviewees feeling comfortable to open up and provide full details of their experiences to a male researcher. My previous experiences of coaching, particularly within female soccer, helped to build rapport with the interviewees and establish a safe and comfortable environment for them to share their personal experiences (DiCicco-Bloom & Crabtree, 2006).

5.6. Chapter Summary

The present study provides insight on perceived and received social support functions with UEFA B female soccer coaches. The findings relating to the sports coaching literature highlight that the coaches experienced ‘closed’ networks that were often dominated by males. This provided a barrier for them to learn and progress in the coaching profession. With reference to the social support literature, the social networks that were available to the female coaches provided both negative

and positive exchanges of social support resources. With regards to negative exchanges of social support, female coaches encountered sexism from peers, athletes, and family members. On the other hand, positive exchanges of social support resources were also offered to female coaches. For example, informational support was offered by peers who provided advice on training sessions. These results show that female coaches still encounter unsatisfactory social networks that provide a barrier for them to progress. It seems that the social networks female coaches *are* integrated in, offer positive exchanges of social support resources. Understanding if female coaches are satisfied with their social networks can provide researchers and practitioners with knowledge on the types of support that they perceive as satisfactory to provide them with more opportunities to progress and increase their happiness with the coaching profession.

Based on the findings of this study and that of previous sport coaching research (e.g., Norman & Rankin-Wright, 2016; West *et al.*, 2001), it seems that female coaches from different performance contexts may require different types of social support. For example, coaches at the higher levels may require more informational support to assist with tactics whereas females at the lower coaching levels may need more emotional support to deal with sexist comments other coaches. Therefore, it is recommended that further qualitative research is conducted on female coaches perceived and received social support at different performance contexts to understand the types of support that is required at each level. Gaining a deeper understanding of the social support experiences of female coaches at different levels will allow practitioners and NGBs to develop supportive environments (e.g., additional female tutors on courses), to encourage female coaches to stay in coaching and become role models for other female coaches to join the profession and increase

the overall number of females in the coaching profession. The following chapter will aim to offer a discussion of the results from this chapter and the program of research offered in this thesis. This will include theoretical and applied implications, and strengths and limitations of the entire thesis, before future research directions are provided, and a conclusion is offered.

General Discussion

This thesis aimed to qualitatively explore male and female sports coaches social support networks, resources, and functions. Four studies were carried out during this thesis that used a range of research methods and data collection techniques to explore coaches' experiences of stressors, coping, social support, and PWB. A thorough systematic review on the current knowledge in the area of stressors, coping, and well-being in the coaching profession is provided in chapter one and highlighted the influence that social support can play in coping with stressors and provided five main priorities for the thesis to explore. This informed the subsequent research program aiming to investigate social networks, social support resources, and social support functions in sports coaching.

Chapter three examined male and female sports coaches' perceptions of social support, social network structure, experiences of social support resources, and the situations where coaches use social support. To explore coaches social network structures, sociograms and SNA were used to make available visual ego-network diagrams of coaches' social networks. Chapter four developed on from this by exploring male and female sports coaches social support resources over a six-week period, investigating coaches' perceptions of social networks using a novel method, and understanding the perceived effects of social support resources on coaches' stressors. The longitudinal research design provided original data on the types of social support resources that the coaches social network provided over an extended period of three interviews. In addition, during interviews one and two, a novel data

collection technique of interviewee-aided photo-elicitation was utilized to explore coaches' perceptions of their social network. This allowed the coaches to accumulate images and or photos on the perceptions of their social support networks. Chapter five explored the final social support conceptualization of social support functions among female coaches. More specifically, a longitudinal exploratory multiple case study explored perceived and received social support functions with female soccer coaches who held a UEFA B qualification to investigate whether they perceive their social network and support resources as satisfactory. The multiple case study approach permitted for holistic data to be collected with a hard to access population of UEFA B licensed female soccer coaches who had also been involved in the FA BAME scheme. In this chapter, the results from the systematic review are discussed as a scoping study in the research areas of stressors, coping, and well-being among sports coaches that formed the foundations of the subsequent program of work (chapters three, four, and five). Next, the key findings from chapters three, four, and five are drawn together and discussed under the headings of social networks, social support resources, and social support functions. Attention is then directed to the strengths and limitations of the thesis, and implications for theory and practice. To finish, a conclusion from the program of research is presented.

The systematic review presented in the introduction provides an original and comprehensive overview of the literature on stressors, coping, and well-being among sports coaches. Findings emphasized that coaches encounter a variety of organizational (e.g., planning training), performance (e.g., poor performance from athletes and themselves), contextual (e.g., age of coach), interpersonal (e.g., work-life balance), and intrapersonal (e.g., expectation on self) stressors, reinforcing the notion that coaching is a particularly stressful occupation (Gould *et al.*, 2002;

Thelwell *et al.*, 2008a). To cope with these stressors, coaches used functions of coping (emotion-, problem-, appraisal-, avoidance-, approach-focused) or coping families (dyadic coping, escape, information seeking, negotiation, problem solving, self-reliance, support seeking). These results highlight that coaches deploy coping that they perceive to be most effective for that stressor (Folkman, 1991). In particular, social support was frequently reported as a way of coping with stressors (e.g., venting frustrations about peers) and producing positive PWB effects. With regards to PWB, the review found that coaches with higher PWB were reported to be more likely to demonstrate autonomy supportive behaviors for their athletes. Emphasizing that increasing coaches' PWB has a beneficial effect on themselves and the athletes they work with. Previous health literature (e.g., Applebaum *et al.*, 2014; Cohen, 2004; Rueger *et al.*, 2016) has suggested that social support can increase PWB by reducing anxiety and depression. Therefore, coaches using social support to cope with stressors can increase their PWB. The results of the systematic review highlight the importance of social support when coping with stressors and increasing PWB. This provides a rationale for further exploration of social support networks, resources, and functions with coaches in this program of research.

6.1. Social Networks

Chapter three provides novel theoretical insight into the structure of coaches' social networks using SNA. The use of SNA to expose the social network structures of sports coaches was important as it generated original, specific information on social networks in the form of diagrams previously not reported in the social support literature. For instance, the chapter highlighted that coaches turned to friends, family, and miscellaneous for support, but peers were predominantly avenues of support for coaches in the form of informational support. Despite this research not being

conducted with coaches, literature with social workers, (e.g., Collins, 2008), nurses (e.g., Woodhead *et al.*, 2016), and athletes (e.g., Rees & Hardy, 2000; Rosenfeld *et al.*, 1989) have all reported that informational support from peers through group discussions and mentoring, increased work performance because they (social worker, nurse, athlete) were provided with information to complete tasks effectively. Hence, providing coaches with more applied opportunities to develop relationships with peers through social activities (e.g., social CPD events), can increase the informational support that they receive which in turn, advances their coaching skills. The significance of peers was also discussed by female soccer coaches in chapter five. Building relationships with peers was of particular importance for the coaches in this study as they frequently encountered social networks that they found difficult to obtain access to. Previous research with female coaches has stated how difficulty developing social networks, decreases their intentions to stay and progress in the coaching profession (Cunningham & Sagas, 2003a, 2003b; Norman, 2014). With regards to practical implications, for female coaches to perform at their optimum, access to social networks needs to be made more accessible through CPD events and opportunities to work with other coaches.

Whilst support from peers was highlighted as important, chapter three emphasized that the most influential support population for coaches in this study were friends. This could be because friends provide the widest range of social support resources (Rosenfeld *et al.*, 1989). The use of sociograms alongside interviews provided original theoretical insight by illuminating that individuals had friends who were also coaches that provided informational and emotional support. In addition, the coaches in chapter four also had friends that had little interest in coaching which provided them with instrumental support by allowing them to switch

off from coaching. This highlights the applied implication that social support from friends can have an important role in an individual's retention (e.g., Wilcox, Winn, & Fyvie-Gauld, 2005), effort (e.g., Duncan, Duncan, & Strycker, 2005), and coping during stressful experiences (e.g., Bianco, 2005) whilst at work. In particular, it is important that an individual surrounds themselves with people who are positive, optimistic, and unconditional in their support as this has the potential to alter one's appraising of stressors from threatening to challenging or benign (Lazarus & Folkman, 1984). Overall, the findings from chapters three, five, and the aforementioned research, bring to attention that coaches' social networks should include a wide variety of relationships (e.g., peers, friends, family, and athletes). Of particular applied importance may be interactions with peers and friends. Having diverse relationships within a social network increases the types of social support resources (e.g., emotional and informational support) that are offered to the coach. This can help coaches cope more effectively with stressors and enhance PWB.

It is also theoretically necessary to study coaches' perceptions of social networks. Chapter four explored coaches' perceptions of their social networks using interviewee-aided photo-elicitation. Chapter four found that coaches in this study perceived their social networks as consistent (e.g., repeated messages), honest (e.g., about availability), understanding (e.g., of the situation), and challenging (e.g., pushing them to develop). A lack of a social network can be a stressor for coaches (Olusoga *et al.*, 2009; Stynes *et al.*, 2017), but a social network that is honest can create a safer environment and a greater feeling of relatedness with peers (Olusoga *et al.*, 2010). The importance of relatedness in sport has been highlighted in a number of studies (e.g., Adie, Duda, & Ntoumanis, 2012; Alcaraz *et al.*, 2015; Podlog, Lochbaum, & Stevens, 2010) exploring basic physiological needs (Deci & Ryan,

2000). For example, Bentzen *et al.* (2016) found that over a season, higher levels of relatedness in HPCs also related to a positive change in work satisfaction and PWB. Understanding what coaches perceive as important in their social networks, such as in chapter four, can provide knowledge to practitioners of what is key for coaches to encourage in their social network. Practically, this can increase coaches' interactions with others, feelings of relatedness to the coaching community, and the feeling of being part of a coaching group that can lead to them enjoying work more. The increase in positive experiences of social support and enjoyment with work can enhance PWB and performance.

6.2. Social Support Resources

The network members in an individual's social network, provide social support resources with the aim of helping them to cope with stressors (Heaney & Israel, 2008). Chapters three and four both explore social support resources with coaches. The collective results from these chapters provide novel theoretical insight to the social support literature by suggesting that all four types of social support resources (appraisal, emotional, informational, and instrumental) are offered to coaches by their social network. The cross-sectional data from chapter three suggested that informational support from peers was used most frequently by coaches. Receiving informational support can help to deal with a loss of confidence, performance concerns, and interpersonal problems (Rees & Hardy, 2004). This can help coaches deal with a number of potential issues in both their sporting and personal lives. The female coaches in chapter five discussed the importance of instrumental support alongside informational support to help with development. Instrumental support (e.g., tangible support) from the female coaches' networks helped them to develop by providing them with opportunities to work with other

coaches or attend coaching qualifications (e.g., letter of recommendation from technical director). The longitudinal data from chapter four advances on from these results by suggesting that coaches may use more than one type of social support resource to cope with the same stressor and that this can aid the effectiveness of coping. This highlights the importance of having a social network that can provide a variety of social support resources and a possible reason for why coaches perceived friends as the most influential support.

Findings in chapter four found that social support resources offered provided stress-buffering and or main-effects on stressors (Cohen & Wills, 1985). With regards to stress-buffering, coaches in this study that suggested that receiving social support resources prior to a stressor occurring helped to buffer against the potential harmful effects of stressors (Cohen *et al.*, 2000). For example, venting to a friend about a lack of athlete numbers for training, helped to regulate their emotions prior to the event. It seems that the coaches in this study use social support resources that they perceive are the most appropriate to cope with a specific stressor (Folkman, 1991) and that the support resources offered to an individual had beneficial effects regardless of the scale of support. Reducing the potential negative effects of stressors can help coaches to be effective when coaching whilst also reducing the amount of coaches that experience burnout (Malinauskas *et al.*, 2010).

6.3. Social Support Functions

Research on social networks and social support resources provides knowledge on the avenues of support that coaches turn to and the types of support that these avenues of support can offer. However, it is also key to study the availability and satisfaction of the social networks and the exchanges of social

support resources provided to an individual that is currently lacking in the social support and sports coaching literature. In chapter five, female soccer coaches who held a UEFA B license discussed that they were not always satisfied with the availability of social networks in the soccer community because they encountered networks dominated by males that they could not gain access too. This makes it difficult for them to progress (Kilty, 2006; Norman & Rankin-Wright, 2016; West *et al.*, 2001) due to the lack of access to formal networks of peers providing informational support to gain knowledge in order for them to develop (Stoszkowski & Collins, 2016). Chapter four highlights that male and female coaches want their social networks to be understanding and protective to create a safe environment for them to develop, whilst also challenging them to progress and push themselves. However, it is clear that the female coaches' social networks in chapter five were not always understanding or protective. If coaches do not have access to and or are not satisfied with their network, this can cause them to feel isolated (Olusoga *et al.*, 2009). Feeling isolated in the workplace can have negative impacts on commitment and work performance (Mulki, Locander, Marshall, Harris, & Hensel, 2008; Stoica, Brate, Bucuță, Dura, & Morar, 2014), leading to a number of negative health consequences (e.g., cardiovascular disease, immune function; Hawkey & Cacioppo, 2010). If coaches feel isolated then they may not be fully committed to the role, drop out of coaching, and or experience burnout.

Females' intentions to leave coaching can be exacerbated by negative exchanges of social support from their social network as highlighted in chapter five. This predominantly came in the form of sexism from athletes, peers, and family members. Receiving negative exchanges of social support can also cause female coaches to feel isolated (Norman, 2010a), making coaching a less attractive

profession. On the other hand, positive exchanges of social support resources can provide a positive impact on performance and experiences of stressors for female coaches (Gould *et al.*, 2002; Knights & Ruddock-Hudson, 2016). The female coaches in chapter five were satisfied with the social networks that they did have access to as these provided positive exchanges of social support resources (e.g., supportive tutors during coaching qualifications). A particularly important context for positive exchanges of social support to occur was during coach education courses. Coach education courses are an integral part of the journey for a coach to become an HPC (Erickson *et al.*, 2007) and therefore, courses should aim to provide positive social environments for learning. However, this is often not the case for females as coach education provisions tend to be dominated by males with course tutors often demonstrating a predisposition towards associated male attributes, orientations, and characteristics (Lewis *et al.*, 2018). More needs to be done by NGBs to develop all-inclusive coach education programs and promote positive social support experiences to attract more females into coaching.

6.4. Strengths and Limitations

6.4.1. Strengths

This program of research consists of a number of strengths. The first strength is the novel qualitative data collection techniques (SNA, photo-elicitation) and research strategies (multiple case study) that are applied throughout the thesis. Utilizing different data collection techniques can provide answers to different kinds of research questions (Polkinghorne, 2005). This allowed for appropriate techniques and strategies to be used to explore the conceptualization of social support presented in chapter one, enhancing the current theoretical knowledge. For example, after

considering the available literature (e.g., Frey, 2007; Marin & Wellman, 2009; Wäsche *et al.*, 2017) and in alignment with the social constructionism assumptions that underpinned this thesis, SNA and sociograms were deemed appropriate for use to provide data on social network structures (Borgatti, Mehra, Brass, & Labianca, 2009) in chapter three. Furthermore, the use of longitudinal research designs in chapters four and five offers insights in the coaching literature that is currently lacking (Levy *et al.*, 2009; Thelwell *et al.*, 2010) by exploring coaches experiences over an extended period.

A second strength relates to the sampling strategies employed throughout this thesis. A large amount of the coaching literature has used males as their sample for the research (e.g., Judge *et al.*, 2015; Nikolaos, 2012; see, for a review, chapter one). Whilst this research provides an understanding with male coaches, it neglects females' experiences. This program of research provides a more balanced sample of male (n=11) and female (n=14) coaches' experiences and perceptions that allows for a comprehensive understanding of coaches' social support networks, resources, and functions from both genders. In addition, the samples of other studies predominantly involve elite level coaches (e.g., Didymus, 2016; Olusoga *et al.*, 2009, 2010, 2012; Thelwell *et al.*, 2008a, 2008b, 2010) and ignore the experiences of coaches in other contexts (e.g., novice). The sample throughout this thesis (chapters three, four, and five) enabled the experiences of different performance contexts (level one to level five qualified coaches) to be heard. This advances the current academic knowledge in the sport coaching literature. Research with coaches from various contexts, helps to provide an understanding of the support that coaches need at each level to progress and therefore, increase the number of high-quality coaches at the elite levels. Overall, this program of research develops social support knowledge by

providing comprehensive insight on male and female coaches social support networks, resources, and functions at different levels of the profession whilst also allowing the reader to make a more balanced judgment on coaches' experiences of social support.

The consistent reflexive practice that was employed throughout the research is a third strength. Literature has recently advocated reflexivity in coaching, sport psychology, and research (Cushion, 2018; Crompton, Miles, Hanton, & Niven, 2007; Darawsheh, 2014; Huntley, Crompton, Gilbourne, Sparkes, & Knowles, 2014) to enhance professional development, link theory to practice, promote critical thinking, and lead to self-awareness that promotes learning and enhanced practice (Cushion, 2018; Darawsheh, 2014). Reflecting throughout this thesis provided an opportunity for myself to reflect and develop as an academic (e.g., interviewing technique) and be increasingly critical of the literature and my own research quality. In addition, it provides an opportunity to be transparent with the reader about the process of completing each chapter (Berger, 2015). The thorough systematic review in chapter one and maintaining reflections in a Microsoft® Word® document throughout chapters three, four, and five, helped to inform the bottom-up approach employed during this thesis, which is a further strength. The Microsoft® Word® document allowed me to reflect during data analysis and the results of each chapter to provide future research directions that informs the ensuing chapter.

6.4.2. Limitations

Although this program of research raises the importance of social support among sports coaches and offers a number of methodological and applied strengths, it is not without limitations. First, the interviewees recruited during this thesis can be

seen as a strength or a limitation. Specifically, the range of coaches sampled from different sports and levels might inhibit the level of detail of the research as each sport and level may provide a variety of different experiences. Whilst I understand this, as a social constructionist, I believe that all experiences are individual and therefore provide a variety of different narratives. A second limitation relates to the sample and their cultural background. All coaches involved in this thesis were white British. Whilst not purposefully selected this way, this sample limits the implications of the research to this specific group and fails to explore coaches' experiences from diverse cultural and ethnic backgrounds. Thirdly, the methodology used throughout this thesis is a potential limitation. The use of novel data collection techniques used during this thesis provides unique information on the social networks and perceptions of social support among coaches. However, I had little experience of using these techniques and so was constrained by my experience. Whilst I had coaching knowledge and experience to discuss and build rapport with coaches, the lack of research experience potentially limited the detail and opportunity for data collection that perhaps other researchers would have. As a reflexive researcher, I was able to reflect and learn from my previous interview experiences. For example, I reflected on the taking of written notes during interviews and adapted this for later interviews when I decided to stop writing down notes. In addition, my supervisors acted as critical friends throughout the thesis to support and challenge (e.g., through discussion) my way of practice to ensure that rigorous research was being conducted.

6.5. Applied Implications

The results presented during the course of this thesis have a number of applied implications for sports coaches, practitioners working with coaches, organizations, and NGBs. Firstly, chapter one highlighted that coaches encounter a variety of stressors and that social support can be an important coping strategy for coaches to deal with stressors. Therefore, it is important that sports psychology practitioners working with coaches understand the importance of social support to deal with stressors and hence, perform to a higher level. This way, practitioners can help coaches to build relationships that will assist them to cope with stressors. For example, developing relations with other coaches that can provide informational support, such as advice on how to deal with major competitions, can assist in buffering against the negative effects of stressors. This would help coaches improve the performance of themselves and that of their athletes.

Exploring social network structures in chapter three also has applied implications. To expand, it seems that not all coaches are aware of the usefulness and importance of social support. Some of the coaches in the study reported that they do not think about their social support. Therefore, it is recommended that NGBs should educate coaches on the usefulness of social support and how to build effective social networks through coaching qualifications and CPD events. Chapter three also highlighted the influence of friends in coaches' social networks, therefore, particular focus during CPD events should illuminate the importance of coaches maintaining relationships with friends to enhance PWB. For example, describing the types of social support resources that friends can provide and the benefit of this on coach development and performance.

Findings from chapters three, four, and five illuminates that coaches frequently receive social support through peers in their formal social networks. This can include coach mentors. The desire for a coach mentor and formal networking among coaches is consistent with previous research (e.g., Allen & Shaw, 2009; Kilty, 2006; West *et al.*, 2001). Coaches can learn and improve their coaching by working with other coaches to foster competence and relatedness. Therefore, organizations and NGBs should provide opportunities for coaches to meet and have conversations with other coaches. This could include NGBs making it easier for individuals to gain access to coach mentors by having mentors that work with local clubs. It may also be beneficial to include set time during coaching education courses and CPD events that allows for coaches to socialize. This could help coaches to develop by getting advice from peers who may be more experienced than themselves.

Chapter five provides insights into female soccer coaches positive social support exchanges which have not been previously reported in the literature. This has the potential to confound issues around the lack of females in the coaching profession because the messages conveyed in the literature do not portray coaching as an attractive profession for females (e.g., Kilty, 2006; Norman & Rankin-Wright, 2016). Yet, the findings from chapter five provide examples of positive experiences of social support that could be more helpful in attracting more females to coaching. Sport organizations and NGBs should try to promote more positive social support experiences (e.g., assistance from coach tutors during coaching courses) of female coaches to attract more into coaching. Female only CPD events that allows coaches to share their positive social support experiences and discuss ideas with other female coaches, may be an effective of way of doing this.

6.6. Future Research Directions

Throughout this thesis, a number of suggestions relating to further investigations have been offered that are relevant to each chapter. This section will focus on how the social support, sports coaching, and sport psychology literature can be taken forward by future research based on the collective findings of this thesis. First of all, the systematic review provides a review of the previous literature on stressors with sports coaches and found only one study that focused on appraisals (Didymus, 2016). It would be recommended that future sport psychology research quantitatively and qualitatively explore coaches' appraisals of stressors and the social support literature investigate the potential influence that social support may have on appraisals for coaches. Social support may have protective qualities against the adverse effects of stressors by making coaches appraise stressors less negatively (Lakey & Cohen, 2000). For example, consider the stressor of a key player getting seriously injured. A threatening appraisal from the coach might be that the next match will be lost because one of the best players are injured. However, with support from their social network, this may be modified to a more challenging appraisal, such as, I have lost a good player but this provides an opportunity for another player to perform. Appraising stressors as more challenging or benign can help coaches to perceive stressors more positively and assist them to cope better. This can have a positive influence on their PWB as they are not appraising as many situations as harmful to their well-being. Secondly, chapter one highlights the lack of research investigating coping effectiveness among coaches. Researchers may want to further study the effectiveness of coping with coaches, in particular, social support and the effectiveness of the types of social support resources. This line of enquiry is important when creating effective coping interventions for coaches because NGBs

and coaching organizations (e.g., UK Coaching) can understand which coping strategies are most effective to teach coaches.

Thirdly, whilst chapters four and five provide novel cross-sectional and longitudinal insight into the social support resources with coaches, additional qualitative research is required that explores resources over a season. Currently, only one study to date has explored coaches' well-being over a season using quantitative techniques (Bentzen *et al.*, 2016). Therefore, additional qualitative research in the forms of interviews and diaries would provide information that aligns closer to the multidimensional constructs of stressors and social support. This would develop the social support literature by enhancing our understanding of social support over time, as well as the sports coaching literature by providing awareness of coaches experiences over a season.

Fourth, it is recommended that researchers should explore the perceptions of male coaches and tutors to understand if they perceive their actions towards female coaches as positive or negative. Insight in this area would develop the social support and sports coaching literature by helping network members to understand their influence on female coaches and create environments that promote female coach development and provide more positive social support exchanges. It seems that the support received during coaching courses is important for female coaches' intentions to stay in the profession. Therefore, it is suggested that future research explores female coaches' experiences of social support during coach education programs with recommendations from coaches on how to their experiences can be improved. This is important to develop our knowledge on females social support experiences, as well as for them to progress, they need to complete coach education courses and female

coaches' intentions may be affected by their experiences during coach education courses (Lewis *et al.*, 2018).

Finally, there is also a lack of cross-cultural research on social support with coaches. The majority of sports coaching literature reviewed in chapter one conducted research in the U.K. or America. Therefore, further research is warranted across different countries to understand whether social support cultures are unique to particular environments. This would allow for NGBs of respective countries to provide interventions and courses that are more effective for their population of coaches. Furthermore, the sample in the thesis were all white British. To gain an understanding of coaches' experiences beyond that of white British, future research should qualitatively explore coaches' experiences from diverse cultural backgrounds as their cultures may differ from other coaches and put additional emphasis on different social support members. This would provide practitioners with information so that they can tailor support toward specific individuals.

6.7. Conclusion

The purpose of this thesis was to qualitatively explore male and female sports coaches' social network, resources, and functions. Previous research has focused on the relationships between stressors and social support (see, for a review, Fletcher & Scott, 2010) without fully appreciating the complex nature of social support among coaches. This thesis makes an original contribution to the sport psychology, coaching, and social support literature by exploring the conceptualization of social support with coaches and its influence on performance, PWB, and intentions to coach using a variety of novel qualitative techniques. The systematic review presented in chapter one highlighted the overtly stressful nature of the coaching

profession and the importance of social support in coping with stressors. Chapter three explored coaches social network structures by offering visual diagrams of the network using SNA. The influence that support from friends has on coaches is a particularly novel finding, demonstrating that whilst peers are a commonly used avenue of support, friends are more influential due to the social support resources that they can offer. Chapter four focused on the social support resources offered to coaches over a six-week period and highlighted that coaches use all four types of resources (e.g., appraisal, emotional, informational, and instrumental support), but mainly informational support. The findings also suggested that social support has both stress-buffering and main-effects on stressors. For that reason, social support should be offered to coaches prior to potential stressful situations to reduce the negative effects of stressors. Finally, social support functions were studied in chapter five with three female coaches. The coaches mentioned that it was difficult to access formal networks to progress as a coach and therefore were not always satisfied with their social networks. However, the social networks they did have access to, frequently provided positive exchanges of social support resources. Consequently, NGBs should provide additional opportunities for female coaches to encounter those formal networks through social coach education activities.

Based on the findings of this thesis, NGBs and coaching organizations need to provide coaches with more opportunities to socialize with other coaches. This will allow them to gain informational support required for their development. This could be done using social CPD events that educate coaches on the importance of social support and allow coaches time to build relationships with their peers. This thesis presents researchers with a strong and comprehensive foundation on which to further advance social support understanding among sports coaches such as exploring social

support functions, further qualitative longitudinal studies (e.g., interviews and diaries), and research with coaches of specific sports (e.g., soccer, rugby, or tennis).

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* References marked with an asterisk indicate studies that were included in the systematic review.

Appendices

Appendix A –PRISMA-P Checklist for Conducting a Systematic Review



PRISMA-P 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	

Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2 for each meta-analysis).	

Appendix B –Kmet *et al.* (2004) Standard Quality Criteria

Table 1. Checklist for assessing the quality of quantitative studies

Criteria	YES (2)	PARTIAL (1)	NO (0)	N/A
1 Question / objective sufficiently described?				
2 Study design evident and appropriate?				
3 Method of subject/comparison group selection or source of information/input variables described and appropriate?				
4 Subject (and comparison group, if applicable) characteristics sufficiently described?				
5 If interventional and random allocation was possible, was it described?				
6 If interventional and blinding of investigators was possible, was it reported?				
7 If interventional and blinding of subjects was possible, was it reported?				
8 Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?				
9 Sample size appropriate?				
10 Analytic methods described/justified and appropriate?				
11 Some estimate of variance is reported for the main results?				
12 Controlled for confounding?				
13 Results reported in sufficient detail?				
14 Conclusions supported by the results?				

Table 2. Checklist for assessing the quality of qualitative studies

Criteria	YES (2)	PARTIAL (1)	NO (0)
1 Question / objective sufficiently described?			
2 Study design evident and appropriate?			
3 Context for the study clear?			
4 Connection to a theoretical framework / wider body of knowledge?			
5 Sampling strategy described, relevant and justified?			
6 Data collection methods clearly described and systematic?			
7 Data analysis clearly described and systematic?			
8 Use of verification procedure(s) to establish credibility?			
9 Conclusions supported by the results?			
10 Reflexivity of the account?			

Appendix C – Sample Invitation to Participate

SPORTS COACHES AND SOCIAL SUPPORT

Invitation to Participate

Dear Sir/Madame,

My name is Luke Norris and I am a PhD student at Leeds Beckett University in the area of sports psychology, in particular social support and well-being in sports coaches. To develop knowledge in this area I am planning to recruit interviewees who are currently engaged in sports coaching to take part in my research project. The project is integrated within the Carnegie School of Sport and will be supervised by an experienced supervisory team (Dr Faye Didymus and Dr Mariana Kaiseler).

The aims of this research are to examine male and female sports coaches' social support resources over a six-week period, to explore sports coaches' perceptions of their support network, and to investigate whether social support is perceived as a buffer against stressors. This will hope to inform coaches, researchers, coach educators, organizations, and governing bodies about the most helpful ways to support coaches during their practice and therefore improving coach well-being.

To complete this aim, three face-to-face interviews will be conducted during August and September 2017 with coaches to investigate experiences of social support when coaching and how coaches perceive their support network and their position within it. During the first interview, you will be asked about your social support experiences to date and provided a task to complete for the second interview. The task is called photo-elicitation and requires you to take up to 12 photos over a 2-week period; up to 4 photos of how you see your support network, up to 4 photos on how you see yourself within your network, and up to 4 photos on anything else that you think is significant about your support. A second interview will then be arranged

to discuss the photos that you have taken and your social support experiences since our previous meeting. A final interview will be conducted 3 weeks after the second interview to discuss social support experiences since the previous interview and also discuss the effects of social support on stressors.

If you have any questions, please do not hesitate to contact myself or one of the project supervisors. After reading the relevant information, if you would like to take part in the study, then please contact me (Luke Norris) with my details attached below. May I take this opportunity to ask you to forward this information to any individuals who you think may be interested in taking part in the project? Thank you for taking the time to read this invitation. I look forward to hearing from you.

With best wishes,

Luke Norris

Carnegie School of Sport
Cavendish G07
Leeds Beckett University
Headingley Campus, Leeds, LS6 3QS
E-mail: L.Norris@leedsbeckett.ac.uk

Dr. Faye Didymus (Director of Studies)
Tel: 0113 812 6709
Carnegie School of Sport,
Fairfax Hall 115
Leeds Beckett University.
Headingley Campus, Leeds. LS6 3QS.
E-mail: F.Didymus@leedsbeckett.ac.uk

Dr. Mariana Kaiseler (Supervisor)
Carnegie School of Sport,
Fairfax Hall 207
Leeds Beckett University.
Headingley Campus, Leeds. LS6 3QS.
Tel: 0113 812 4026
E-mail: M.H.Kaiseler@leedsbeckett.ac.uk

Appendix D – Sample Participation Information Sheet

SOCIAL SUPPORT THROUGH THE LENS OF SPORTS COACHES

Interviewee Information Sheet

Luke Norris (**PhD Researcher**)
Carnegie School of Sport
Cavendish G07
Leeds Beckett University
Headingley Campus, Leeds, LS6 3QS.
E-mail: L.Norris@leedsbeckett.ac.uk

Dr. Faye Didymus (**Director of Studies**)
Senior Lecturer in Sport and Exercise Psychology
Carnegie School of Sport,
Fairfax Hall 115
Leeds Beckett University.
Headingley Campus, Leeds. LS6 3QS.
Tel: 0113 812 6709
E-mail: F.Didymus@leedsbeckett.ac.uk

Dr. Mariana Kaiseler (**PhD Supervisor**)
Senior Lecturer in Sport and Exercise Psychology
Carnegie School of Sport,
Fairfax Hall 207
Leeds Beckett University.
Headingley Campus, Leeds. LS6 3QS.
Tel: 0113 812 4026
E-mail: M.H.Kaiseler@leedsbeckett.ac.uk

Introduction

We would like to invite you to take part in a research study. This interviewee information sheet will inform you about the research project and explain the processes involved with taking part. It is important that you read and understand the process involved before taking part. Therefore, please take the time to read the following information carefully and discuss it with myself or others. Please feel free to ask any questions using the contact details above. Take time to decide whether or not you wish to take part. It is up to you to decide whether or not to take part. If you do decide to take part in the project, you will be asked to sign an Informed Consent Form.

What is the purpose of the research?

Coaches social support resources have not been thoroughly examined by researchers. Furthermore, social support has been suggested to act as a buffer against the effects of stressors, but this has not been investigated with coaches. Research on coaches' social support resources is important because an effective social support network may help reduce stress and can, therefore, have implications for coach's effectiveness and well-being. The aims of this research are to examine male and

female sports coaches social support resources over a six-week period, to explore sports coaches' perceptions of their support network, and to investigate whether social support is perceived as a buffer against the effects of stressors. This can inform coaches, researchers, coach educators, organizations, and governing bodies about the most helpful way to support coaches during their practice.

Who is doing this research and why?

This study is being conducted by Luke Norris as part of his PhD research project that is supported by Leeds Beckett University. The PhD is based on sports coaches' experiences of social support. Luke is supervised by Dr Faye Didymus and Dr Mariana Kaiseler, both of whom are senior lecturers in sport and exercise psychology at Leeds Beckett University.

What will I be required to do?

If you agree to participate in the study, you will be asked to read and sign an Informed Consent Form. We will then agree a date, time, and at a mutually convenient and safe location for the first face-to-face interview. During a 6-week period you will be asked to engage in three interviews (one in August and two in September). In the first interview, you will be asked about your social support resources to date and provided a task to complete for the second interview. The task is called interviewee-aided photo-elicitation and requires you to take up to 12 photos over a 2-week period; up to 4 pictures of how you see your support network, up to 4 photos on how you see yourself within your network, and up to 4 photos on anything else that you think is significant about your support. Pictures will be taken on a smartphone or, if you do not have a smartphone, a disposable camera that will be given to you by the researcher. A second interview will then be arranged to discuss the photos and your social support experiences since our previous meeting. A final interview will be conducted 3 weeks after the second interview to discuss social support experiences since the previous interview and also discuss the perceived effects of social support on stress. The interviews will be recorded using a digital recording device and will last approximately 60-90 minutes. The interviews will only be recorded with your permission. This time allows for introductions, the interview, and a post-interview debrief.

What personal information will be required from me?

Before the first interview, you will be asked to complete a demographic details form. This will involve you disclosing your name (or pretend name), age, gender, coaching qualifications, and coaching experiences. During the interview you will be asked to share information about your social support network and experiences of social support during your coaching role. All information provided on the demographic details form and during the interview will remain confidential.

Are there any risks in participating?

There is a small risk that recalling your coaching experiences and discussing your support network could be upsetting. We have made sure that we have adequate provisions in place in case you find the interviews upsetting. For example, you can choose not to answer any of the questions in the interviews and you can stop the interviews at any point in time and without providing a reason for doing so. However, previous participants who have taken part in similar research projects have

said that being a participant has been an insightful process that has helped them to reflect on their experiences. At the top of this information sheet, you will find contact details for various people who you can contact if you wish to speak to someone about the project itself or about your involvement and experiences. In addition, you may wish to attend a well-being centre in your local area (<http://www.leeds.gov.uk/pages/default.aspx>).

Can I change my mind?

Yes. After you have read this information and have asked any questions that you may have, you will be asked to complete an Informed Consent Form where you agree to take part in the study. However, if at any time, before, during, or after the sessions, you wish to withdraw from the study then please contact Luke Norris using the contact details at the top of this document. You can withdraw at any time during the interview process and any time up until Friday 23rd February 2018, for any reason, and without consequence. If you decide to withdraw, your data will be destroyed in accordance with Leeds Beckett University guidelines for the disposal of sensitive data.

Confidentiality and Anonymity

All of the personal details that you provide will remain protected and confidential. You will be allocated a false name that will be used to identify your data. The false names will be used in any reproduction of the data to assure anonymity throughout. The data you provide will be stored in locked cabinets and treated in accordance with the Data Protection Act 1998. All data and information will be stored confidentially during the study with demographic details sheets, consent forms, and data being kept in separate locked cabinets to which only the lead researcher has access. Information will be destroyed when the data is no longer required or after a six-year period. This is in accordance with the Data Protection Act 1998 (<http://www.leedsbeckett.ac.uk/public-information/data-protection/>).

What will happen to the results of the study?

Interviews will be transcribed word-for-word and analysed by the researchers. Pictures will be used in parallel to the text. The results of the study will discuss themes from all of the transcripts. You can request a copy of your interview transcript from Luke Norris if you wish. Personal information will be made anonymous in subsequent reproduction of the data. Results will be written up as part of a postgraduate thesis and peer-reviewed journal publications, and will be presented at international conferences. The information gained from this research will be used to make recommendations for best practice for coaches, practitioners, organisations, and governing bodies. This investigation is in compliance with the Leeds Beckett University Research Ethics Policy.

What if I am not happy with how the research is conducted?

Where possible, please contact the researcher (Luke Norris: L.Norris@leedsbeckett.ac.uk) if you are not happy with how the research was conducted. Leeds Beckett University has policies relating to Misconduct in Academic Research (https://www.leedsbeckett.ac.uk/staff/files/restricted/Code_of_Good_Practice_Misconduct_in_Academic_Research.pdf) and Whistle Blowing (http://www.leedsbeckett.ac.uk/about/files/Whistleblowing_procedure.pdf), which

are available online. If you wish to speak to someone who is not directly involved with the research about how it was conducted, please contact Dr. Nicola Kime (N.Kime@leedsbeckett.ac.uk).

Who should I contact if I have questions?

If you require further information or have any questions regarding this study, please do not hesitate to contact Luke Norris or one of the research supervisors using the contact details at the top of this document. If you wish to speak to an independent person who is not directly involved in the research, please contact Dr Nicola Kime (Local Research Ethics Co-ordinator,

N.Kime@leedsbeckett.ac.uk, 0113 812 6008) or Dr. Andrew Manley (BPS Chartered Sport and Exercise Psychologist, A.J.Manley@leedsbeckett.ac.uk, 0113 812 4717).

Thank you for reading this information sheet.

Appendix E –Demographic Details Sheet



SPORTS COACHES AND SOCIAL SUPPORT

Name:

Age:

Gender:

Telephone number(s):

E-mail(s):

Sport:

Coach level:

Coaching experience:

For official use only

Date and time of interview:

Participant pseudonym:

Appendix F – Chapter Three Informed Consent Form



SPORTS COACHES AND SOCIAL SUPPORT

Informed Consent Form

(to be completed after Interviewee Information Sheet has been read)

**Please initial
each statement
below**

	YES	NO
The purpose of this study has been explained to me. I understand that this study is part of a doctoral research project, is designed to further scientific knowledge, and that all procedures have been approved by the Leeds Beckett University Research Ethics Committee.		
I have had the opportunity to ask questions and discuss the research study and I am satisfied with the answers to my questions.		
I understand that I am under no obligation to take part in the study.		
I understand that I may withdraw from the study at any time without penalty or reason, and that I will not be required to explain my reasons for withdrawing.		
I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as an interviewee in this study will remain secure. The only exceptions to this rule are if I provide evidence of criminal activity.		
I understand that the interview will be recorded using a digital recording device.		
I understand that the information I provide will be stored securely for up to six years and will then be destroyed in accordance with Leeds Beckett University guidelines for the disposal of sensitive data.		
I understand that there are Local Research Ethics Co-ordinators at Leeds Beckett University who I can approach if I have any further questions about the research or		

if I am not happy with how the research is conducted.		
I give my permission for anonymised data (interview excerpts) to be used when reporting the findings.		
I have read and understood the Interviewee Information Sheet for this study and am satisfied with the information provided.		
I agree to participate in this study.		

Signature of interviewee.....

Name (block capitals).....

Date.....

Signature of researcher.....

Name (block capitals).....

Date.....

Appendix G – Chapter Three Interview Guide



SPORTS COACHES AND SOCIAL SUPPORT.

Interview Guide

Researcher:

Luke Norris, PhD Student at Leeds Beckett University

18 Sandlewood Crescent, Leeds, LS6 4RT

L.Norris@leedsbeckett.ac.uk

Supervisory team:

Dr Faye Didymus, Director of Studies (F.Didymus@leedsbeckett.ac.uk, 0113 812 6709)

Dr Mariana Kaiseler, Supervisor (M.H.Kaiseler@leedsbeckett.ac.uk, 0113 812 4026)

Introduction

[Interviewee to have read the interviewee information sheet and consent form, and returned a signed copy of the consent form to the researcher prior to the interview]

[Researcher and interviewee to introduce themselves and discuss any initial questions]

In this interview, I am interested in hearing about your experiences as a sports coach and your experiences with social support. I will be asking questions relating to your background, you're coaching, and your experiences of social support. During the interview I will ask you to complete a task that looks at the structure of your social support. Please do your best to answer the questions as honestly and open as possible.

Do you have any questions about the interview before we begin?

If at any point you do not understand what I am asking or need some clarification, please feel free to ask as we go along.

Interview Questions:

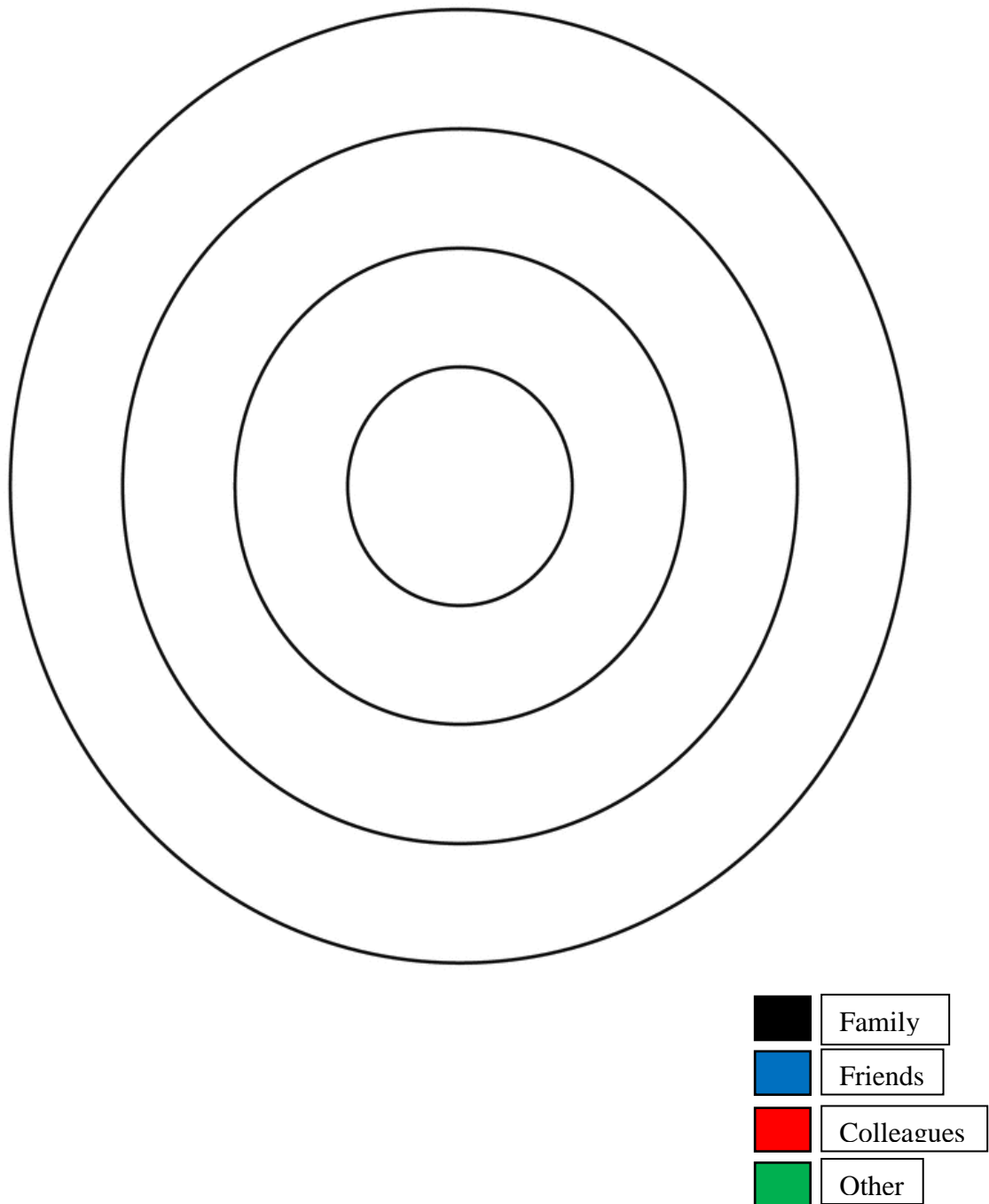
[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Tell me a little bit about yourself...	<p>What sport do you coach?</p> <p>How did you get into coaching?</p> <p>What level do you currently coach at?</p> <p>What are the good and bad parts of your coaching role?</p> <p>What do you enjoy most?</p> <p>What motivates you to stay involved with coaching?</p>	<p>Background</p> <p>Rapport</p> <p>RQ1</p>
When I say 'social support', what comes to mind?	<p>What does social support mean to you?</p> <p>Is it something that you think about?</p> <p>How important do you think social support is in your everyday coaching?</p> <p>How important has social support been across your coaching career?</p> <p>Can you tell me more about that?</p>	<p>RQ1</p> <p>RQ2</p>
What is your experience of social support during coaching?	<p>What does social support look like for you?</p> <p>When do you rely on social support?</p> <p>How do you make use of social support?</p> <p>What kinds of social support have you used previously?</p> <p>What more can you say about your social support?</p>	<p>RQ1</p>
Give me some examples of the social support that you have sought and or received.	<p>Can you tell me more about that?</p> <p>When do you seek social support?</p> <p>What did that look like in practice?</p> <p>Was this type of social support helpful? If so, why? If not, why not?</p> <p>Did anything change as a result of the</p>	<p>RQ1</p> <p>RQ2</p>

	<p>social support that you received?</p> <p>When has social support helped you?</p> <p>When has social support hindered you?</p>	
<p>What are your thoughts about social support at different levels of coaching?</p>	<p>Has your social support network changed during your career? If so, how?</p> <p>Has social support changed for you according to life events? If so, how?</p> <p>What types of support did you have at the early stages of your coaching career?</p> <p>What types of social support do you have now?</p> <p>Who have been the significant individuals in your support network?</p> <p>Have the significant individuals in your support network changed over time?</p>	RQ2
<p>We are now moving on to the Sociogram task. Here are the four circles that I mentioned in the information sheet. Imagine that you are at the centre of the middle circle. What I would like you to do is, with the different coloured pens, write the names of who is in your social support within these</p>	<p>Who is in your social support network?</p> <p>Tell me more about each of the people that you have included.</p> <p>What is it about these people that have made you include them?</p> <p>Tell me more about why these people are closer to the centre.</p> <p>Tell me more about why these people are further away from the centre.</p> <p>Is there anyone you would like to use more in your social support network?</p> <p>Is there anyone you would like to use less in your social support network?</p>	<p>RQ1</p> <p>RQ2</p>

<p>circles. The closer they are to you in the centre, the closer they are to you, and the more frequently you use them. The further away they are from you, the further away and less frequently you use them. If you could write the names of people in your family in black, friends in red, work colleagues in blue, and 'other' in green.</p>		
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Appendix H –Chapter Three Sociogram



Appendix I –Chapter Four Informed Consent Form



SOCIAL SUPPORT THROUGH THE LENS OF SPORTS COACHES Informed Consent Form

(to be completed after Interviewee Information Sheet has been read)

**Please initial
each statement
below**

	YES	NO
The purpose of this study has been explained to me. I understand that this study is part of a doctoral research project, is designed to further scientific knowledge, and that all procedures have been approved by the Leeds Beckett University Research Ethics Committee.		
I have had the opportunity to ask questions and discuss the research study and I am satisfied with the answers to my questions.		
I understand that I am under no obligation to take part in the study.		
I understand that I may withdraw from the study at any time during the interview process and any time up until Friday 2 nd March 2018 without penalty or reason, and that I will not be required to explain my reasons for withdrawing.		
I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as an interviewee in this study will remain secure. The only exceptions to this rule are if I provide evidence of criminal activity.		
I understand that the interview will be recorded using a digital recording device.		
I understand that I must get consent from all people who are included in any photos before I can use it and must not take photos of any children unless they are my own.		
I understand that the information I provide will be stored securely for up to six years and will then be destroyed in accordance with Leeds Beckett University guidelines for the disposal of sensitive data.		

I understand that there are Local Research Ethics Co-ordinators at Leeds Beckett University who I can approach if I have any further questions about the research or if I am not happy with how the research is conducted.		
I give my permission for anonymised data (interview excerpts) and for the photos that I have taken and discussed to be used when reporting the findings.		
I have read and understood the Interviewee Information Sheet for this study and am satisfied with the information provided.		
I agree to participate in this study.		

Signature of interviewee.....

Name (block capitals).....

Date.....

Signature of researcher.....

Name (block capitals).....

Date.....

Appendix J –Chapter Four Interview Guide



SOCIAL SUPPORT THROUGH THE LENS OF SPORTS COACHES

Interview Guide

Researcher:

Luke Norris, PhD Student at Leeds Beckett University
Carnegie School of Sport, Cavendish G07, Leeds Beckett University,
Headingley Campus, Leeds, LS6 3QS.

L.Norris@leedsbeckett.ac.uk

Supervisory team:

Dr Faye Didymus, Director of Studies (F.Didymus@leedsbeckett.ac.uk, 0113
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812 4026)

Introduction

[Interviewee to have read the interviewee information sheet and consent form, and returned a signed copy of the consent form to the researcher prior to the interview]

[Researcher and interviewee to introduce themselves and discuss any initial questions]

In this interview, I am interested in hearing about your experiences as a sports coach and your experiences with social support. I will be asking questions relating to your background, your coaching, and your experiences of social support. Please do your best to answer the questions as honestly as possible.

I am going to record the interview using a digital recording device. Is that okay?

I am also going to be taking notes during the interview. This is nothing to worry about, it is for me to use to remind myself later on.

Do you have any questions about the interview before we begin?

If at any point you do not understand what I am asking or need some clarification, please feel free to ask as we go along.

Interview Questions: First Data Collection Point

(August 2017)

[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Can you tell me a little bit about yourself?	<p>Can you tell me more about that?</p> <p>What sport do you coach?</p> <p>How did you get into coaching?</p> <p>What level do you currently coach at?</p> <p>What are the bad parts of your coaching role (if any)?</p> <p>What are the good parts of your coaching role?</p> <p>What do you enjoy most?</p> <p>What time of the year is this for you? (e.g., pre-season, beginning, end, holiday)</p> <p>Is there anything else I should know?</p>	<p>Background</p> <p>Rapport</p> <p>RQ1</p>
When I say ‘social support’, what comes to mind?	<p>What does social support mean to you?</p> <p>Is it something that you think about?</p> <p>How important do you think social support is in your everyday coaching?</p> <p>How important has social support been across your coaching career?</p> <p>Can you tell me more about that?</p>	<p>Rapport</p> <p>RQ1</p>
What are your previous experience of social support as a coach?	<p>What kinds of social support have you used previously?</p> <p>Can you provide a positive experience of social support that you have received?</p> <p>Can you provide a negative experience of social support that you have received? (e.g., sexism, politics)</p> <p>What does your social support look like for</p>	<p>RQ1</p> <p>RQ2</p> <p>RQ3</p>

	<p>you?</p> <p>Who have been the significant individuals in your support network?</p> <p>Have the significant individuals in your support network changed over time?</p> <p>When do you seek social support?</p> <p>How do you make use of social support?</p> <p>What did that look like in practice?</p> <p>Was this type of social support helpful? If so, why? If not, why not?</p> <p>Did anything change as a result of the social support that you received?</p> <p>Has social support helped when you were stressed? If so, when? If not, why not?</p> <p>What influence (if any) has social support had on you?</p> <p>Are you happy with your social support network at the moment?</p> <p>How do you see yourself within your network?</p> <p>What expectations do you have for your support?</p> <p>What more can you say about your social support?</p> <p>Have you got anything else you would like to add?</p>	
<p>So now we have gone over your social support experiences and perceptions, I am now going to explain the</p>	<p>Have you any got any questions about the task?</p>	<p>RQ2</p>

<p>interviewee-aided photo-elicitation task. What I would like you to do before the next interview is to take up to 4 pictures of how you see your support network, up to 4 photos on how you see yourself within your network, and finally, up to 4 photos on anything else that you think is significant about your social support. You have 2 weeks to take the pictures (you do not have to use all 2 weeks). Once you have taken all the pictures that you feel are necessary, send them to me by email using the address on the participation information sheet. We will then</p>		
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discuss the photos at the next interview.		
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**Interview Questions: Second Data Collection Point
(September 2017)**

[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Tell me a little bit about what you have been up to since we last spoke.	<p>Can you tell me more about that?</p> <p>How has your coaching been going?</p> <p>Has anything significant happened in your life (e.g., major life events)?</p> <p>Has your coaching career progressed (or otherwise)?</p> <p>What time of the year is this for you? (e.g., pre-season, beginning, end, holiday)</p> <p>Is there anything else I should know?</p>	<p>Background</p> <p>Rapport building</p> <p>RQ1</p> <p>RQ2</p>
What do you remember about our discussion relating to social support?	<p>Can you tell me more about that?</p>	<p>Rapport building</p> <p>RQ1</p>
Tell me about your experiences of social support since last time we met.	<p>What can you recall?</p> <p>Tell me about your relationships with others (e.g., friends, family, athletes, coaches).</p> <p>Has your social support changed? If so, how has it changed?</p> <p>When have you used your social support since the last time we spoke?</p> <p>What did that look like in practice?</p>	<p>RQ1</p> <p>RQ2</p> <p>RQ3</p>

	<p>Was this type of social support helpful? If so, why? If not, why not?</p> <p>Did anything change as a result of the social support that you received?</p> <p>Can you provide a positive experience of social support that you have received?</p> <p>Can you provide a negative experience of social support that you have received? (e.g., sexism, politics).</p> <p>Did social support help when you were stressed? If so, when?</p> <p>What influence (if any) did the social support you received have on you?</p> <p>Are you happy with your social support network at the moment?</p> <p>What expectations do you have for your support?</p> <p>How do you see yourself within your support network?</p> <p>What more can you say about your social support?</p>	
<p>Now that we have caught up about your social support, can you show and tell me about the pictures that you took concerning the task I set in the previous interview.</p>	<p>Can you tell me more about that?</p> <p>Why did you take that picture?</p> <p>What does this mean to you?</p> <p>Have you got anything else you would like to add?</p>	RQ2

Interview Questions: Third Data Collection Point
(September 2017)

[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Tell me a little bit about what you have been up to since we last spoke.	<p>Can you tell me more about that?</p> <p>How has your coaching been going?</p> <p>Has anything significant happened in your life (e.g., major life events)?</p> <p>Has your coaching career progressed (or otherwise)?</p> <p>What time of the year is this for you? (e.g., pre-season, beginning, end, holiday)</p> <p>Is there anything else I should know?</p>	<p>Background</p> <p>Rapport building</p> <p>RQ1</p> <p>RQ2</p>
What do you remember about our discussion relating to social support?	<p>Can you tell me more about that?</p>	<p>Rapport building</p> <p>RQ1</p>
Tell me about your experiences of social support since last time we met.	<p>What can you recall?</p> <p>Tell me about your relationships with others (e.g., friends, family, athletes, coaches).</p> <p>Has your social support changed? If so, how has it changed?</p> <p>When have you used your social support since the last time we spoke?</p> <p>What did that look like in practice?</p> <p>Was this type of social support helpful? If so, why? If not, why not?</p>	<p>RQ1</p> <p>RQ2</p> <p>RQ3</p>

	<p>Did anything change as a result of the social support that you received?</p> <p>Can you provide a positive experience of social support that you have received?</p> <p>Can you provide a negative experience of social support that you have received? (e.g., sexism, politics).</p> <p>Did social support help when you were stressed? If so, when?</p> <p>What influence (if any) did the social support you received have on you?</p> <p>Are you happy with your social support network at the moment?</p> <p>What expectations do you have for your support?</p> <p>How do you see yourself within your support network?</p> <p>What more can you say about your social support?</p>	
Now that we have caught up about your social support, what do you remember about our discussions relating to the photos?	Is there anything you would like to add?	RQ2

<p>Moving on, research suggests that social support can act as a buffer against the negative effects of stress. Can you give me an example of when social support has helped when you have been stressed?</p>	<p>Can you tell me more about that?</p> <p>How has social support helped you when you have been stressed? If so, how?</p> <p>When is social support most effective?</p> <p>According to the literature, there are four support resources that potentially operate as stress buffers; emotional, appraisal, informational, and instrumental.</p> <p>Tell me about your experiences of emotional support as a coach (i.e., times when someone has met your emotional needs such as listening).</p> <p>Has this type of support helped you when you have been stressed, and if so, how?</p> <p>Tell me about your experiences of appraisal support as a coach (i.e., times when someone has improved your self-confidence).</p> <p>Has this type of support helped you when you have been stressed, and if so, how?</p> <p>Tell me about your experiences of informational support as a coach (i.e., times when someone has given you information</p>	<p>RQ3³</p>
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³ Research Questions:

- 1) What are male and female sports coaches' experiences of social support over a 6-week period?
- 2) What are sports coaches' perceptions of their support network?
- 3) Does social support act as a perceived buffer against stress?

	<p>such as advice).</p> <p>Has this type of support helped you when you have been stressed, and if so, how?</p> <p>Tell me about your experiences of instrumental support as a coach (i.e., times when someone has given you tangible support such as looking after the kids).</p> <p>Has this type of support helped you when you have been stressed, and if so, how?</p> <p>Which (if any) of the four types of support provides the best buffer against stress and why?</p> <p>Have you got anything else you would like to add?</p>	
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Appendix K –Chapter Four Task Information Sheet

SOCIAL SUPPORT THROUGH THE LENS OF SPORTS COACHES

Task Information Sheet

Below is an overview of the interviewee-aided photo-elicitation task for you to take away. Please can you to take up to a total of 12 photos regarding the following themes:

- 1) Up to 4 photos of how you see your support network.
- 2) Up to 4 photos on how you see yourself within your network.
- 3) Up to 4 photos on anything else that you think is significant about your support.

***When taking photos, please make sure you have consent from all involved.**

Only photograph adults. No children.*

When taking photos, please only photograph adults. No children allowed unless they are your own. You have two weeks until the date of this interview to take the photos. Once you have taken all the photos that you wish you to take, could you please send them to the lead researcher, Luke Norris, by email at L.norris@leedsbeckett.ac.uk. If you require further information or have any questions, please do not hesitate to contact Luke Norris using the contact details on the participation information sheet.

Appendix L – Chapter Five Informed Consent Form



Evaluating the Changing Experiences of Female Football Coaches

Informed Consent Form

(to be completed after Interviewee Information Sheet has been read)

Please **initial** all questions as appropriate and date and sign where indicated below:

	Yes	No
The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the Leeds Beckett University Research Ethics Committee.		
I have had an opportunity to ask questions about my participation.		
I understand that I am under no obligation to take part in the study.		
I understand that I have the right to withdraw from this study at any stage for any reason, and that I will not be required to explain my reasons for withdrawing.		
I understand that all of the information I provide will be treated in strict confidence and will be kept anonymous and confidential to the researchers. The only exceptions to this rule are if I provide evidence of criminal activity.		
I understand that the information I provide will be stored securely for up to six years.		
I understand that there are Local Research Ethics Co-ordinators at Leeds Beckett University who I can approach if I have any		

further questions about the research or if I am not happy with how the research is conducted.		
I have read and understood the interviewee information sheet.		
I agree to participate in this study.		

Your name: _____

Date: _____

Your signature: _____

Name of investigator: _____

Date: _____

Signature of investigator: _____



Evaluating the changing experiences of female football coaches.

Theme One Interview Guide

Researcher team:

Dr Faye Didymus

Dr Leanne Norman

Dr AJ Rankin-Wright

Dr Mariana Kaiseler

Luke Norris

Introduction

[Interviewee to have read the interviewee information sheet and consent form, and returned a signed copy of the consent form to the researcher prior to the interview]

[Researcher and interviewee to introduce themselves]

In this interview, I am interested in hearing about your experiences as a woman football coach. I will be asking questions relating to your background, your expectations of the FA Coach Bursary Scheme, your well-being, social support functions, and your sense of self. Please do your best to answer the questions in a candid way.

Do you have any questions about the interview before we begin?

If at any point you do not understand what I am asking or need some clarification, please feel free to ask as we go along.

Interview Questions: First Data Collection Point
(September 2016)

[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Tell me a little bit about you.	Can you tell me more about that? What sport do you coach? How did you get into coaching? What coaching experience have you got? Is there anything else I should know?	Background Rapport building RQ1
Tell me about your experiences as a coach to date.	What achievements can you recall? What are the good and bad parts of your coaching role? What do you enjoy most? What motivates you to stay involved with coaching?	Background Rapport building RQ1
What led you to take part in the FA Coach Bursary programme?	How did you get to be on the programme? What are your initial thoughts about the programme? How do you feel coming into the programme? What expectations do you have for the programme?	Background Rapport building RQ1
What does the term 'wellbeing' mean to you?	When I say 'wellbeing,' what comes to mind? What does it mean to you to be psychologically well? Do you think wellbeing means different	RQ1 RQ3

	things for male and female coaches?	
Tell me about your own wellbeing.	<p>How happy are you with your life at the moment?</p> <p>How happy are you when you are coaching?</p> <p>Do you feel fulfilled with your life at the moment?</p> <p>How fulfilled are you with your coaching at the moment?</p> <p>What emotions do you experience when you are coaching?</p> <p>Do you experience a sense of purpose when you are coaching and, if so, what does that look like?</p> <p>What meaning is there in your coaching?</p> <p>Tell me about your experiences of mastery when you are coaching (i.e., times when you have felt accomplished and competent in your role).</p> <p>Tell me about the autonomy that you have when you are coaching (i.e., the level of control that you have over tasks and decisions).</p> <p>Have you have grown professionally and or personally as a result of your coaching? If yes, what does that growth look like?</p> <p>Tell me about your relationships with others (e.g., friends, family, athletes, other coaches).</p>	<p>RQ1</p> <p>RQ3</p>
Now that we know what wellbeing	<p>Can you tell me more about that?</p> <p>Do aspects of your coaching role play a</p>	<p>RQ1</p> <p>RQ3</p>

means to you and how you perceive your own wellbeing, tell me about what influences your wellbeing.	<p>part?</p> <p>What aspects of your coaching role are influential?</p> <p>How do you feel your identity as a female influences your experiences as a coach?</p> <p>What is it about being a female coach that influences your wellbeing?</p> <p>We know that females are often an under-represented group within coaching. Does being in the minority when you are coaching play a part in your wellbeing?</p> <p>What is it about being in the minority that influences your wellbeing?</p>	
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**Interview Questions: Second Data Collection Point
(March 2017)**

[Start Dictaphone recording]

Core questions	Prompts	Researcher notes
Tell me a little bit about what you have been up to since we last spoke.	<p>Can you tell me more about that?</p> <p>How has your coaching been going?</p> <p>Has anything significant happened in your life (e.g., major life events)?</p> <p>Is there anything else I should know?</p>	<p>Background</p> <p>Rapport</p> <p>building</p> <p>RQ1</p> <p>RQ2</p>
Tell me about your experiences at the last FA Coach Bursary programme	<p>What can you recall?</p> <p>What were the take home messages?</p> <p>What did you enjoy most?</p> <p>What did you enjoy least?</p>	<p>Rapport</p> <p>building</p> <p>RQ1</p> <p>RQ2</p>

meet during September.	If you could change one thing about the programme, what would that be?	
What do you remember about our discussion relating to wellbeing?	Can you tell me more about that?	Rapport building RQ3
Tell me about your wellbeing since we last met.	<p>Has anything changed?</p> <p>How happy are you with your life at the moment?</p> <p>How happy are you when you are coaching?</p> <p>Do you feel fulfilled with your life at the moment?</p> <p>How fulfilled are you with your coaching at the moment?</p> <p>What emotions do you experience when you are coaching?</p> <p>Do you experience a sense of purpose when you are coaching and, if so, what does that look like?</p> <p>What meaning is there in your coaching?</p> <p>Tell me about your experiences of mastery when you are coaching (i.e., times when you have felt accomplished and competent in your role).</p> <p>Tell me about the autonomy that you have when you are coaching (i.e., the level of control that you have over tasks and decisions).</p> <p>Have you have grown professionally and or personally as a result of your coaching? If yes, what does that growth</p>	<p>RQ2</p> <p>RQ3</p>

	<p>look like?</p> <p>Tell me about your relationships with others (e.g., friends, family, athletes, other coaches).</p> <p>Have your relationships changed since starting the FA Coach Bursary programme? If so, how have they changed?</p> <p>Have you have grown professionally and or personally as a result of the FA Coach Bursary programme? If yes, what does that growth look like?</p>	
<p>Now that we have caught up about what your wellbeing might look like at the moment, tell me about what has influenced your wellbeing over the past few months.</p>	<p>Can you tell me more about that?</p> <p>Have aspects of your coaching role have played a part?</p> <p>What aspects of your coaching role have been influential?</p> <p>How do you feel your identity as a female influences your experiences as a coach?</p> <p>What is it about being a female coach that influences your wellbeing?</p> <p>We know that females are often an under-represented group within coaching. Does being in the minority when you are coaching play a part in your wellbeing?</p> <p>What is it about being in the minority that has influenced your wellbeing?</p>	<p>RQ2</p> <p>RQ3</p>
<p>What influence (if any) do you think the FA Coach Bursary programme has had</p>	<p>Can you tell me more about that?</p> <p>What aspects (if any) of the programme have influenced your wellbeing?</p> <p>If the programme could do one or two</p>	<p>RQ2</p> <p>RQ3</p>

on your wellbeing?	things differently to enhance your wellbeing, what would those things be?	
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Appendix N –Sample of Interview Reflections

Interview Reflections

Chapter Three- Interview Four (08/09/16)

- 1) During the interview, I had to stop half way through to change the batteries in the Dictaphone. This had not happened before as I was replacing the batteries for the majority of the interviews. However, this time it was on 2 (out of 3) bars and I thought it would last the whole interview but it did not. The interviewee was fine with it and we discussed it off recording during the change of batteries. For future interviews I will be making sure the previous process is completed; changing the batteries before each interview. (This has not happened again in following interviews).
- 2) Maybe leading answers from the interviewee. E.g., so, what would you say motivates you to stay in coaching? Is it the challenges? Does not need the last bit.
- 3) Near the beginning of the interview, the interviewee talked about tutoring coaches and helping them to have a better starting point than she had. Could have asked her to expand around that.
- 4) Lack of support when at a small club in isolation. Could have got her to expand more around this. However, different levels of coaching and social support is asked later in the interview. But do not be afraid to ask questions earlier if it comes up.

- 5) When asked the question about do you think about social support, the interviewee answered no, just expect it to be there. Could have asked to elaborate around it more.
- 6) Despite missing some areas to probe, I did manage to probe in some situations which helped provide more data.
- 7) I think the sociogram task at the end was a good addition. It gets people to think about who is in their support network, bringing up people/things they may not have previously thought of, and why they have them/it in their network. It also gives them some ownership around the interview rather than all discussions. I think that I also give them a lot of freedom with this task, they can put who/what they want, in whatever category they want, and the option to include previous people in their network if they are influential enough to them.
- 8) Towards the end, I asked around the mentoring program which had not been previously discussed during the interview.
- 9) I feel that I have a good ability to build rapport with interviewees. A good ability to be able to read interviewees and whether they are nervous, and adapt my style to try and make them feel more comfortable.

Chapter Three- Interview Five (08/09/16)

- 1) This interview was a great learning tool as the interviewee had never been involved in anything like this before. This showed as the interviewee was nervous and provided some short answers at the beginning of the interview. It was a learning tool as I had to work harder to push answers

from the interviewee that was not an issue with previous interviewee. I feel like the interviewee grew in confidence during the interview providing some longer answers towards the end.

- 2) I spoke more during this interview but feel this was necessary to get more information of the interviewee.
- 3) The interview was conducting in a café. All the previous interviews had been conducted in a quiet meeting room, making it a challenge to transcribe and may have affected the interviewees responses. However, the interviewee chose the location and when asked if there was anywhere quieter, the interviewee replied he felt more comfortable there.
- 4) When discussing whether the interviewee thinks about social support he says that 'It's quite weird in a way', could have asked him to expand on this.
- 5) I think that I have improved my questioning and probing during the interviews. Asking questions and not waffling and also an example of probing is when the interviewee said he thought the social support had helped him be a better coach. I waited for him to finish what he was saying and then went back to that point to see if he could expand on it more.
- 6) Interviewee discussed structure of social support and being there for each other at the higher levels. Does he think this differs at the lower levels? If so, why?
- 7) Could have asked for thoughts on mentors.
- 8) How do you know which ones know what they are on about? How do you choose?

- 9) At the end of an interview, rather than finish straight up, ask if there is anything else they would like to say.

Chapter Five – Round One, Interview One (14/10/2016)

- Initial thoughts after the interview is that the interview went really well. I feel like I asked good probing questions around the topic areas and we had some good discussions. I feel the data collected will be useful for the study and that I am gaining in comfort and confidence when conducting interviews, even though I have plenty more to learn.
- We built a good rapport over the fact that we both coach in girls youth football and have similar philosophies.
- Having reflected back over the interview and with regards to my own research area, I would have liked to ask more questions around the relationship's aspects. This will be followed up during the next interview.
- The interviewee seemed very enthusiastic to be part of the study and to be a further part of the study.

Chapter Five – Round One, Interview Two (10/11/2016)

- The interviewee seemed very enthusiastic to be part of the study and to be a further part of the study.
- We built a good rapport over the fact that we both coach in girls youth football and have similar philosophies.

- Having reflected back over the interview and with regards to my own research area, I would have liked to ask more questions around the relationship's aspects. This will be followed up during the next interview.

Chapter Five – Round One, Interview Three (09/12/2016)

- I think that this interview went well, however, due to time constraints of having to get the train there and back on the same day, I felt that towards the end it was a bit rushed. It was fine in the end yet a lesson for next time is to make sure that I have even more time to conduct the interview.
- The interviewee seemed very enthusiastic to be part of the study and to be a further part of the study.
- Having reflected back over the interview, I would have liked to ask more questions around the relationship's aspects. This will be followed up during the next interview.

Chapter Five– Round Two, Interview Four (07/02/2017)

- This interview felt very good coming out of it. I probed the interviewee more around the relationships.
- I found the end of the interview really interesting as we discussed the females on CPD course. Coaches are required to complete CPD hours and we discussed how they could make female only CPD session

available as it was felt once the BAME bursary was over, then they were left out on their own again.

Chapter Five – Round Two, Interview Two (08/03/2017)

- The rapport still seemed good from the previous interview. I think that I have possibly the best rapport with this coach.
- Prior to this interview I listened back over the first interview with this coach. This helped to refresh my memory on what was discussed previously and bring some of these points up during this interview.
- I got back into the habit of speaking a lot about my own experiences, and whilst this did help in some situations, the majority of the time it was not needed, wasted time, and stopped the coach from talking. This may have been because, as described above, we had good rapport and so maybe I got too comfortable.
- At the beginning of the interview we got side tracked talking about our coaching experiences. Whilst this was acknowledged during the interview that we went off track, in the future, I should talk less about my previous experiences (also see above).
- The coach brought up about attending a support day and I probed well to find out more about the support day and she felt about it.
- I could have probed the coach more about why she is happy and fulfilled with life at the moment.

Chapter Five - Round Two, Interview Three (21/03/2017)

- Due to time, money, and work constraints, this interview had to be conducted over the phone. This was my first phone interview and overall, I think it went okay.
- Because of the short time between organizing and completing the interview, I was not able to listen back over the first interview with this coach. Whilst this may not have had much of an impact, it would have been nice to refresh myself over what was discussed in the previous interview.
- To begin with the coach was short with her answers and I found it more difficult to get her to talk than during face-to-face interviews. This is because you cannot see the other person, their body language etc. and therefore may not even have their full concentration.
- During this interview, the coach mentioned how someone close to her had recently been diagnosed with a serious illness. This was a shock to me as I had never had something like this happen to me during an interview. I consoled her and tried not to probe too much around that issues, even though it was discussed a little more later on in the interview. This may also explain why some of the answers were shorter than previous because she had other, more personal things on her mind.
- During the questions around autonomy when coaching, the coach mentions how she feels full autonomy when she is coaching. I missed an opportunity to probe her around this more (e.g., can you expand on why you feel full autonomy when you are coaching at the moment?). This will become better with time as I become more and more relaxed conducting

interviews and take more time to digest what has been said and respond accordingly.

- Listening back over the interview there are a couple of points where I am just thinking shut up Luke! This has got better with the more interviews I have conducted and I understand why I did this during this interview because I was trying to get the coach more comfortable and therefore open up more but sometimes it is best just so shut up, say yes and not give an example from myself.
- Overall, I feel that, despite some firsts for me, the interview was a success and some great data was gathered about coaching and well-being.

After completing all of the interviews and reflecting back, it was interesting to see how my knowledge and set beliefs about coaching had potentially influenced the interviews. From discussions with colleagues it was intriguing to think back about how, because I already knew some of the abbreviations and meanings of things, I did not always question them (for example RTC), which thinking back, I should have.